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SCIENCES**

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SOCIAL
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EDWIN R. A. SELIGMAN

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ALVIN JOHNSON

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- Ray, P. Orman
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- Read, Thomas T.
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- Salin, Edgar
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- Szekfü, Julius
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PREFACE

I. HISTORY OF THE ENCYCLOPAEDIA. It is only in comparatively recent years that the interdependence of the social sciences has come to be recognized as a concept necessary to their progress. The older sciences had such a great mass of phenomena to arrange and to interpret that each of them was busy in pursuing its own problems. The newer sciences found enough to do in staking out their respective fields and in vindicating their claim to existence as separate disciplines. The result was that all the sciences continued in water-tight compartments and it was thought that the greatest progress could be made by emphasizing differences rather than similarities. There was in truth much to be said for this point of view in the early years of development; but there has come a slow realization that, while there are all kinds of associations and many angles from which human contacts can profitably be studied, it is a mistake to separate them permanently into independent sections. The sentient being is after all a whole; it is unwarrantable to hold that any one phase of his activity is completely divorced from the others. Especially is this true when we consider the relation of the individual to the group and endeavor to comprehend the subtle influences reciprocally exerted by the various manifestations of common activity. The conclusions reached by the separate sciences were gradually recognized, therefore, as incomplete and provisional, and the demand went forth to attempt a better analysis through a more comprehensive synthesis.

It was in the pursuit of this purpose that after many abortive attempts and premature efforts a movement of real vitality was initiated. In the year 1923 Dr. Alexander Goldenweiser and Dr. Howard B. Woolston of the American Sociological Society sponsored a resolution designed to lead that association to consider whether the time might not have come to attempt some united action in this general direction. In the following year, as the result of the efforts of the above gentlemen and Professor W. F. Ogburn, six of the other leading learned societies in the field of social science appointed committees to consider the suggestion. An energetic campaign to enlist the interest of a wide range of scholars was carried on by Dr. Goldenweiser. A Joint Committee, consisting of three representatives of each association, held several meetings during 1925 and discussed the various possibilities from every point of view. The result of its deliberations was the recommendation that there be undertaken some comprehensive and unifying publication. The task of working out the details of the plan was entrusted to an executive committee of which the subsequent editor-in-chief was made chairman. After much discussion it was resolved to give effect to the ideas of the Joint Committee by the launching of an encyclopaedia.

During the early months of 1926 the report was adopted by each of the cooperating societies and was also approved by the Social Science Research Council. Moreover the report was sent to a small list of distinguished scholars in the various fields concerned in order to elicit their opinions as to the feasibility of the project. Uniformly favorable replies were received. These letters were printed in the *Memorandum on the Projected Encyclopaedia of the Social Sciences* published in 1927.

The executive committee then asked the chairman to serve as editor-in-chief. After much hesitation, due to his appreciation of the responsibility involved, he accepted the invitation, and devoted the next twelve months to the collection of the necessary funds and to the elaboration of the plan. By the spring of 1927 these two objectives had been attained, and in May of that year the Joint Committee was reconvened. At this meeting the number of constituent societies was increased to ten. The sponsors of the Encyclopaedia are thus the following:

American Anthropological Association
American Association of Social Workers
American Economic Association
American Historical Association
American Political Science Association
American Psychological Association
American Sociological Society
American Statistical Association
Association of American Law Schools
National Education Association

The time had then come for the definite organization of the enterprise. The first point was the selection of the staff. After much deliberation the editor-in-chief prevailed upon Dr. Alvin Johnson to become associate editor. Assistants well trained in the various sciences were chosen to take charge of the different fields of work and their number was increased from time to time as occasion demanded. Their names appear on the title page. Acknowledgment should also be made of the help accorded by Dr. Helen Sumner Woodbury, Miss Gladys Boone, Dr. Benjamin Ginzburg, Dr. Gustav Peck and Dr. Alexander Goldenweiser, who at various times were members of the editorial staff. The next point was the provision for the business end of the project. The enterprise was incorporated as Encyclopaedia of Social Sciences, Inc., and the corporation was composed of the Joint Committee. The Board of Directors consists of twenty-one members, eight lay and thirteen academic, the latter being selected by the constituent societies.

During the summer of 1927 the editor-in-chief went abroad in order to enlist the support of the leading European scholars. In the course of a trip which included virtually all of the important universities from Oslo to Florence, he conferred with hundreds of the most distinguished scholars scattered throughout Europe. He was both astonished and heartened by the enthusiasm that was manifested on all sides, and by the readiness of virtually everyone to lend his hearty cooperation in what was recognized to be not only a gigantic project

but one which would be of great importance to the progress of the social sciences throughout the world.

In the autumn of 1927 provision was made for the selection of a board of Advisory Editors. The members of this board were chosen by the editor-in-chief and number seventeen Americans and eleven foreigners. The advisory editors have been heavily drawn upon for constant advice and criticism, and deserve this entirely inadequate word of appreciation for their admirable services. They are not to be held responsible, however, either for the particular articles or for the selection of specific contributors. The responsibility for these matters attaches entirely to the editorial staff.

The Encyclopaedia has suffered an irreparable loss in the death of one of its advisory editors, Leonard T. Hobhouse. He placed his wealth of learning and catholicity of mind most generously at the service of the editors and they will find many occasions in the further development of the work where his advice would have been invaluable.

As the work progressed it became evident that much help would be needed by the editorial staff, in addition to that given by the advisory editors. The field covered by the Encyclopaedia was in large part so untrodden that it was resolved to enlist the aid of several hundred scholars, both here and abroad, to each of whom were referred all manner of queries as to special points falling within their competence. These specialists, whom we have designated as Editorial Consultants, have served without compensation, and to them is in large measure due whatever credit we may have earned in the difficult matter of selection and organization of material.

It had been originally intended to publish the Encyclopaedia in ten volumes. It was soon found, however, that this would necessitate either undue bulk or inordinately thin paper, so that it was finally decided to issue the work in fifteen volumes. The first volume, appearing now, will be followed in regular sequence at the rate of three volumes a year.

II. SCOPE, METHODS AND AIMS OF THE ENCYCLOPAEDIA. The Encyclopaedia includes, in the first place, all of the purely social sciences as they are described in the first section of the introduction. Obviously, however, it can not go so much into detail as would be possible for a series of works dealing with each separate science. Intensive treatment of this kind would be inappropriate because the real object of the Encyclopaedia is not so much to exhaust each particular subject as to bring out in the respective topics the relations of each science to all of the other relevant disciplines. Accordingly we endeavor to include all of the important topics in politics, economics, law, anthropology, sociology, penology and social work. With the technique of these subjects we obviously have to be more brief. A subject such as history is represented only to the extent that historical episodes or methods are of especial importance to the student of society.

In the case of what we have designated in the introduction as semi-social sciences—ethics, education, philosophy and psychology—it becomes necessary to select those topics of which the social aspects are acquiring increasing significance. This is still more true of what we have called the sciences with social implications, like biology and geography on the one hand, and medicine, philology and art on the other. It is, however, precisely the social aspects of these sciences which have come to the front in recent years and which it is especially important to emphasize. The proper treatment of the more or less outlying fields which have never yet been comprised under the head of social sciences, but which it now becomes necessary or at all events desirable to include, is one of the most difficult questions that has confronted the editors. Moreover the requirements of a work which seeks to coordinate the various social sciences and to indicate their relations to the general movement of thought involve the inclusion of many topics not usually treated in the special encyclopaedias.

In considering whether the Encyclopaedia should be primarily a dictionary or, as is customary in Germany, primarily a handbook, the decision has been reached that it ought to combine the characteristics of both. This means that the alphabetical method is followed, but that the arrangement is so flexible as to contain not only short articles of a few lines or paragraphs but also longer articles of ten or twenty thousand words, which will permit of thoroughgoing and original contributions. A carefully worked out system of cross references will enable the student with a special interest to cover thoroughly any part of the field.

It has also been decided to include biographies of deceased persons whose work has been significant in the various sciences in question. As this list will comprise many names hitherto unnoted, it has become necessary to make the typical biography very brief and to allow a longer treatment only in extraordinarily important cases. Even thus, the space allotted to biographies covers about one fifth of the entire contents.

For the sake of giving unity to the work it has been decided, largely at the suggestion of Dr. Goldenweiser, to equip it with an extended introduction, which appears in this first volume. This introduction, as will be noted, is arranged in two main divisions. In the first are a discussion of the meaning of the social sciences and a history of their development arranged according to periods. It is designed to exhibit as far as may be in non-controversial fashion the filiation of the social sciences and their contemporaneous relationship, as well as their dependence on the institutional and general intellectual situation. The second division of the introduction is an account of the social sciences as disciplines, in their historical development, throughout the world. In the final volume it is proposed to include a rigorously selected and annotated bibliography covering the works of primary importance in the development of the social sciences.

The special character of the Encyclopaedia has necessitated methods of approach which are not customary in works devoted to the separate sciences. The first task was to assemble a list of topics for the entire work, to form tentative

plans for the treatment of each topic and to assign it a space valuation. As a preliminary to this it was necessary to make a systematic analysis of each science or of each section of a science, such as the labor problem or government, and to organize this material into topics suitable for encyclopaedia treatment. A survey was made of all the existing reference books in order to note the topics treated, the methods of treatment, the relation to other topics and the allocation of space. On the basis of such data the staff prepared cards indicating the character of the article needed, the space assigned and the probable cross references. By comparison of the various topics we were able to determine how adequately each group covered its part of the field.

At the outset we classified our material as falling under the several sciences, economics, social psychology, etc., and tried to discover some rule of proportion for the distribution of space. In the actual presence of the material, classification and apportionment lost their definiteness and rigidity. Such a topic as wages, for example, may be classified as economic, but the treatment must involve the use of statistical, historical and sociological methods. David Hume may be accredited to philosophy, but he is very important for political science and economics. Psychological methods have to be employed widely in political, social and economic topics. When the Encyclopaedia has been completed, it is safe to say, no one will be able to determine what proportion of the total space has gone to one science, what proportion to another. We are trying to give each topic, wherever it falls, as adequate space as its importance and the nature of the material demand. This does not mean that the space assignment is indicative of the importance attached to the various subjects. Some very important topics can be treated adequately in relatively brief space, as, for example, the doctrine of sovereignty, which has been refined down to clear cut principles. Such a topic as housing, on the other hand, involves a great deal of specific material and requires much more space in relation to its absolute importance.

When a provisional list of topics within each field was completed it was circulated for comment and criticism among the editorial consultants. After noting their suggestions the staff prepared an outline of the contents of each article. This outline was then sent to the contributor, with the object not of limiting his freedom in any way but of pointing out our own conception of how the article would best fit into the general plan. The labor involved in this method of work has been prodigious, but the results, we hope, will prove correspondingly satisfactory.

In the history of encyclopaedia making, the problem of composition has been handled in three ways: the bulk of the work has been done by the staff; it has been assigned in large sections to editorial contributors who have sublet the actual composition to others; it has been distributed widely, each assignment being made directly from the central office. We have followed the last method, for two principal reasons. First, the importance of our enterprise consists not only in its result but also in the process of its making. Those who collaborate

with the staff in preparing the Encyclopaedia will join us in thinking through many of the problems of the relations of the sciences and of the evolution of social scientific ideas. The more we succeed in securing the cooperation of the whole body of social scientists, the greater the value to social science of the work of preparing the Encyclopaedia. Second, by distributing the work widely with especial attention to the interests of each contributor, we are justified in expecting each article to be executed according to the best ability of the writer.

In speaking of our contributors we desire to emphasize the international aspect of the enterprise. It is true that since the work is written in English the great mass of our contributors are English speaking and, since the inception of the project and its management are within the United States, the Encyclopaedia may in one sense be regarded as an American enterprise. It would be a great mistake, however, to consider it as merely a national product. Our policy has been in every case to select the scholar best fitted to write the particular article. Where we find an American of equal competence with a foreigner, we give him the preference, chiefly on the score of convenience. But whenever, as frequently happens, the scholar who is indisputably best qualified for that particular topic happens to be a foreigner, we assign the article to him. In order to afford them the fullest measure of opportunity we have asked our foreign contributors to write in their own language. Therefore articles by foreigners, with the rarest exceptions, have been translated by our staff, so that the contributor must be held responsible only for the content, not for the form.

In the making of the Encyclopaedia we have had three purposes in mind. In the first place it is intended to provide for the scholar a synopsis of the progress that has been made in the various fields of social science in the broadest sense of the term. The student of any particular science should not only find here factual and methodological information of value, but will also have his attention called, perhaps in a hitherto unusual way, to the relation of his own science to the other disciplines involved. What is probably more important at this time, when such rapid advance is being made in more or less untrodden paths, the Encyclopaedia may be expected to serve as an incentive to the votaries of the younger and more inchoate sciences in order to bring to fruition what is now only in germ.

Secondly, the Encyclopaedia will, it is hoped, appeal to a much more numerous class which for lack of a better term might be called the intelligentsia in the various countries. It ought to furnish an assemblage or repository of facts and principles which will subserve the interests of all those who are keeping abreast of recent investigation and accomplishment. It is for this reason that we have made every effort to keep the articles free from all scientific jargon.

Finally, amid the welter and confusion of modern thought, it has been our hope that the Encyclopaedia would constitute a center of authoritative knowledge for the creation of a sounder and more informed public opinion on the major questions which lie at the foundation of social progress and world development.

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 ALLEGIANCE
- Nelson Antrim Crawford*
Asher Hobson
See DAGUESSEAU, HENRI FRANCOIS
Fernando de los Rios
Francis W. Coker
Marcel Marion
Paul Harsin
See EZPELETA, PEDRO AINGO DE
Peter Struve
James P. Baxter, 3rd
L. L. Bernard
Charles E. Chapman
Giuseppe Lombardo-Radice
Richard McKeon
Clara W. Mayer
Rolf Grabower
Lynn Thorndike
Coleman Phillipson
W. C. MacLeod
Raymond Pearl
George E. G. Catlin
See LIQUOR TRAFFIC
Van Wyck Brooks
M. L. W. Laistner
Harold F. Gosnell
See FEDERAL RESERVE SYSTEM
See CONTRACTS
René Hubert
A. Kiesewetter
G. Vernadsky
William Scott Ferguson
Gaudence Megaro
Charles Sumner Lobingier
See MOROCCO QUESTION
Carl Brinkmann
Robert E. Cushman
Edwin M. Borchard
W. R. Vance
William A. White
William Seagle
W. H. Dawson
H. A. Innis
J. H. Richardson
Carl Joachim Friedrich

INTRODUCTION: PART ONE

The Development of
Social Thought
and Institutions

I

What Are the Social Sciences?

From the very beginning of analysis and classification the field of science has been divided between physical nature and the phenomena of mind. The natural sciences have to deal with the phenomena of the universe in which our world forms so tiny a speck. By common consent, although not quite accurately, we contrast with these what are traditionally termed the mental or cultural sciences, those that deal with what takes place in man himself, in the realm of his mental life. We say "not quite accurately" because it is clearly inadmissible to assume that the mind is entirely independent of the body or that the mental processes are not in themselves subject, in part at least, to the play of natural forces.

Accepting, however, the common distinction between the natural sciences, on the one hand, and the mental or cultural sciences, on the other, it is obvious that the latter fall into two categories. The one deals with man as a separate individual, conceived of as dissociated from his fellow beings. The discipline of logic, for instance, deals with certain mental processes of the individual as a separate entity. Other sciences treat of man as a member of a group. In contrast to the separate wants, which can be satisfied by the unaided action of the individual, are wants experienced by the individual which can be satisfied only by associated or group action. These we call the common wants. Common, like separate, wants are experienced by the individual; the difference consists in the appropriate methods of satisfaction. In the one case the satisfaction of the want is obtained by unaided action; in the other by associated action.

The phenomena thus related to group activities are commonly called social phenomena, and the sciences which classify and interpret such activities are the social sciences. The social sciences may thus be defined as those mental or cultural sciences which deal with the activities of the individual as a member of a group.

Since the common wants of mankind are exceedingly diversified, the group activities designed to satisfy these wants are correspondingly manifold. In the measure that these group

activities have been subjected to study, the social sciences have multiplied. They may be said to fall into three classes—the purely social sciences, the semi-social sciences and the sciences with social implications.

Perhaps the earliest of the social sciences is politics, for the most important of human groups has in general been the state. The state is indeed not the earliest group, nor has it always been the most important. In the millennia which have elapsed since the advent of man, the state was a relatively late comer in the succession of human associations. When scientific discussion arose in Greece, the pre-political groups had dwindled to insignificance or had been absorbed by the all-embracing state. The chief concern of the Greek sages was accordingly politics or political science because it dealt with the *polis*, the highest form of the self-governing commonwealth.

On a somewhat lower plane, in the purview of the Greeks, stood the second of the social sciences, economics. For while politics dealt with the state—the noblest embodiment of human striving—economics had reference to the *oikos*, the household which represented man's property relations. The right ordering of the household—including in one's possessions his wife, his children and his slaves—was indeed important; but the acquisition of wealth, especially in what we should nowadays call business, seemed to the Greeks to stand on a distinctly lower level.

When in the sixteenth century the problem of the acquisition of wealth shifted from that of individual salvation, as typified by the mediaeval usury doctrine, to national strength and power, the way was prepared for the advent of modern economics. Because of these national prepossessions, de Wetteville suggested the term political economy; for it was the national state which was to shape the new system of wealth relations. So strong was this feeling that even Adam Smith, despite his doubts as to the desirability of government interference, could not escape from fastening the term political economy on the discipline which he did so much to develop.

It was over a century later before the real social implications of the science were perceived, with a consequence that its leading votaries reverted to the old name given to it by the Greeks and that today we speak of economics, or sometimes of social economics. The political implications are indeed apprehended, but even more than politics itself economics is nowadays recognized as primarily a social science.

The third of the older disciplines that we trace back to the Greeks is history. From the outset history has laid claim to a field co-extensive with human interests. In the work of Herodotus history appears more closely related to the art of literature than to any science, and throughout the centuries history has maintained the union of art with science. In the hands of Thucydides history centered its interest in the state. Its spirit became essentially scientific, and its methods and results represent important contributions to political science. Among the classical and mediaeval successors of Herodotus and Thucydides, while many were essentially annalists or litterateurs seeking dramatic or epic material in past events, the function of history as an inquiry into the genesis and development of political forms and institutions was never entirely forgotten. History has never actually been "past politics" alone; but until comparatively recent times it has served the social sciences mainly through the material it afforded for the interpretation of politics. In the last century history has not only become far more rigorous in its scientific method, but it has extended its scope to the inclusion of the manifold phenomena of human life, individual and mass phenomena as well as those of formal political organization. Thus history has become an indispensable source of material for the interpretation of all manner of social processes.

The fourth of the older social disciplines is jurisprudence. Even in primitive society certain customs hardened into the rigid coercive relations that we call law. But it was long after the legal systems of relatively advanced states had developed, that law was recognized as an embodiment of justice and that jurisprudence arose. It was primarily the Romans who were led to cultivate this science because of the need of solidifying their world empire. The civil law, like the common law, yielded the chief opportunities that existed in the Middle Ages for the discussion of what were the most important relations of man to man. Next to

theology law was the moving force in the creation of the mediaeval universities. It was the most significant of the cultural sciences, and its votaries far outnumbered those devoted to politics or history.

Although Rome sought through its *jus gentium* and *jus naturale*, as England later did through its system of equity, to loosen the rigidity of the early system, the accommodation of the old legal forms to the newer social habits was slow. To this extent jurisprudence was conceived as something quite independent of, and unrelated to, the other social disciplines. It is only in very recent times that a change for the better has ensued. More and more have we come to recognize the reciprocal relations of law and economics; more and more has criminal law been influenced by penology; more and more do we hear of the new sociological jurisprudence. What is taking place, in other words, is a recognition of the fact that legal relations are inextricably intertwined with the other phases of human association, and that an adequate legal system must always reflect the myriad forms of social life. Modern jurisprudence, abandoning its early claim to complete independence, has been definitely recognized as one of the social sciences.

Thus the four older disciplines—politics, economics, history and jurisprudence—have outgrown their early separatism and have increasingly realized their interpenetration. Each is gradually recognizing that it is primarily a social science and that this reciprocity enriches its own domain and deepens its own conclusions.

While the disciplines thus far considered reach back to the beginnings of scientific endeavor, there are others of more recent origin, a result of the modern curiosity as to social relations. The characteristic feature of these newer disciplines is that they arose at a time when a growing recognition of the intertwining of all the human strands in the texture of life was leading to a disappearance of separatism in the older sciences. The newer sciences have thus never presented so hard a crust of tradition to be penetrated.

The first of the newer social sciences is anthropology. A study of early man, historic and prehistoric, became possible only after the rise of some of the natural sciences like geology. The unearthing of primitive artifacts—tools, implements and ornaments—led to the discussion of their uses or social connotations; and the later progress in the study of still existing

primitive groups broadened the comprehension of all manner of early customs. Thus anthropology was ready, almost from the outset, to recognize its affiliations with the other social sciences; and while it succeeded in throwing light on early political, economic and legal conditions it received in turn from these sciences many a valuable suggestion.

The second of the newer social sciences is penology. Until the time of Beccaria and Bentham there was no development of such a science because the offender was from the earliest times deemed to be the rightful object of communal vengeance. The commission of a crime was *lèse majesté*—an infraction of the king's peace or of the community's tranquillity. ✓ It was only natural for society to revenge itself on the malefactor by putting him out of the way. Criminal law was as barbaric as the conception of vengeance. But when it was recognized that attention must be paid not only to the rights of the group but to the possibilities of the individual, the first step was taken toward a more rational theory of punishment, and the science of penology was ushered in. A much longer step in advance, however, was taken when crime was recognized as at least in part a disease. The final advance was the realization of a large degree of social responsibility for both crime and disease. (Modern penology is coming into intimate relations with economic and social conditions in general. Penology as a social pathology is contributing in full measure to the understanding of a normal social life.

Sociology, the next of the newer sciences, is only three-quarters of a century old, and has scarcely come of age even today. It is the most ambitious of all the social sciences, because in a sense the most comprehensive. As its very name signifies, it is an endeavor to lay bare the foundations of all living together, to elucidate the laws which lie at the basis of social intercourse. Far deeper than the economic or the legal or the political relations are those which govern human association in general. Sociology is the social science *par excellence*. It is also the most difficult of the cultural sciences. If it is not easy correctly to appraise one's self, how much more arduous is it to know one's neighbor or to evaluate one's own reactions to him. It is no wonder that sociology is still far from the definiteness and unity that characterize the older social sciences. Nor is it surprising that broad generalizations lacking adequate verification still hold an important place in sociological

theory. Nevertheless sociology remains the most important of human sciences. Only when real progress has been made in the elucidation of its laws, can we hope to attain a comprehension of life itself with its countless facets.

In the formative period in the history of sociology a wide range of social activities were for convenience subsumed under its rubrics, although not essentially related to its theories. Such, for instance, were the history and technique of charities and corrections, and the whole institutional structure built up to deal with them. What characterizes this entire field is the association of scientific inquiry with social action. The typical procedure is an investigation of a concrete situation as, for example, excessive infant mortality in a given area, followed by recommendations for remedial action, and the actual organization and administration of remedial measures.

For this whole range of activities the term social work has come into vogue, a term intended to emphasize the union of inquiry and action. Social work thus conceived holds a position analogous to that of engineering in its modern phases. (Like the engineer the social worker starts with a concrete problem, and in his inquiries draws freely upon all the social sciences. So, too, in devising remedial measures he draws upon materials derived not only from the other social sciences but from the natural sciences and the arts as well. As in the engineering field, so in social work recent tendencies point to a vast extension in the future, with multiform specialization. Schools, hospitals, nurseries, housing, employment in factories or in commercial establishments, institutions for the handicapped may serve as examples of the fields in which the social worker is applying his professionalized methods of investigation and offering his professional services.

✓ The sciences that have thus far been mentioned are the purely social sciences. Side by side with them we must put the semi-social sciences. (These fall again into two categories. Some, however diverse their present-day importance, are social in origin and still retain in part a social content; others, although independent in origin, have acquired in part a social content. Starting in different ways, both groups have reached an identical position. ✓

✓ In the first group the most important is ethics, in a certain sense the most sublime of all sciences. For the right ordering of the moral life is the ultimate aim of human endeavor.

Ethical conduct is primarily a question of the individual, for conscience, the great regulator of conduct, is a personal matter. However, individual morality itself has been increasingly recognized as the resultant of social forces. Without the group there would have been no conception of right or wrong. The origin of morality is to be sought in the efforts of the individual to satisfy certain wants where unaided action no longer sufficed—as in the primitive elephant hunt or search for whales. As against the separate want which can be satisfied by his own action the individual experiences a common want which can be satisfied only through uniting with others. In order to accomplish the end the individual must now defer to his associates. He must cease doing certain things and must begin to do other things. Thus morality is born.

With the multiplication of the common wants new concessions to the other members of the group are continually made, until there emerge certain standards of conduct which are calculated to achieve the desired results. The concepts of right and wrong are thus social in their origin, although it is largely an unconscious process by which the criterion of the distinction is relegated to the individual himself. His conscience develops and the feeling of moral obligation becomes an essentially personal matter from the sway of which the finely attuned individual cannot free himself. The categorical imperative is the last word of individual conduct.

While the science of ethics thus deals chiefly with the problems of the individual, the increasing contact between groups of all kinds has engendered a new aspect of the moral problem, that of the conduct of groups toward each other. It is precisely in this sphere of activity, international and intranational, that the least progress has been made. Group morality is still far inferior to individual morality.

Ethics, therefore, despite the fact that it deals primarily with the individual conscience, is a social science in part, not only because social phenomena are continually creating individual reactions, but also because the contacts of social groups are responsible for the constant emergence of new moral problems. Social ethics constitutes today a not insignificant part of the moral sciences.

Analogous to ethics is education. It is perhaps true that education is not a product of the group in the same sense that individual morality

is the outcome of social forces. Nevertheless education is also, to some extent at least, social in origin. While pedagogics deals with the unfolding of the individual mind and the strengthening of the individual aptitude, it has always been recognized that isolation is incompetent to achieve the desired results. The activity of the individual in the group and the reactions of the group on the individual are of signal importance. Not in vain have schools and classes been invented; not lightly to be dismissed are the educational functions of play, of song and of dance, all of which connote a social origin. Moreover we must not forget that education for the satisfactory accomplishment of the social duties is an indispensable part of all modern curricula. Finally education, in the wider sense, has nowadays come to be predicated of the group as well as of the individual, even though the technique of group education must naturally differ. Education is thus partly social in content, partly social in aim, partly social in method, and may therefore be deemed a semi-social science.

In contrast to ethics and education are those sciences which, originally separate, have acquired a social content. Philosophy, in a certain sense the forerunner of science, was long considered as something entirely independent. When we deal with the final interpretation of life, of thought and of conduct, which we call philosophy, we seem to be treading on ground unbroken by science. But in proportion as parts of the unknown are converted into the known, new sciences are detached from the all-embracing philosophy and pursue a life of their own. It was in this way that chemistry and physics arose out of the mediaeval natural philosophy, and that politics and economics were separated from moral philosophy.

The social relations of man not only constitute one of the many domains still cultivated by philosophy, but they have also acquired a new significance as a recognized factor in the formulation of philosophic doctrines. For it has become increasingly clear that not a few systems of philosophy have themselves been, if not dependent upon, at least modified by, the social and political environment. The character of the problems and the methods of solution have been, in part at least, influenced by social conditions. The consequence is that not only does social philosophy as such demand growing attention but that all philosophy lends a more willing ear to social discussion. In this sense

we may speak of philosophy as in part a social science.

In psychology the transition is more unmistakable. It affords, moreover, an admirable illustration of the way in which the metaphysical elements in philosophy give way to scientific elements. The study of the mental processes of the individual was a favorite field of philosophy and split off into an acknowledged science only when, with the aid of the newly born biology, laboratory methods were applied to the phenomena of individual sense impressions, reactions and the like. Scarcely, however, had psychology vindicated its claim to be a separate discipline than as a study of human behavior it was recognized to be in part social in character. With an ever deeper knowledge of the mechanistic and the biological foundations of life and thought, the psychologist has come to recognize that the entire process has been molded by the human as well as the natural environment, and that the concept of the isolated individual is untenable as an explanation of actual fact. Psychology is therefore becoming social in a double sense. We must interpret the individual mechanism of mental processes, in part at least, in terms of a social environment; and secondly we have to deal with the thought process of the group as such, that is, of the individual not simply as unconsciously influenced by others but as purposively cooperating with others.

✓ In contrast to the purely social sciences as well as to the semi-social sciences, there remains the last category of sciences, some of them natural, others cultural, which have well defined and increasingly recognized social implications.

Of these the first is biology. Biology as the science of life in its genesis and evolution has indeed a far broader scope than man. But in so far as it is applied to human beings it is compelled in its dynamic aspects to deal in large measure with the conditions of associative action. Moreover some of its recent offshoots, like eugenics, have an overwhelmingly social content. Finally, although later in the field than social psychology, social biology in the sense of the science of group changes is not without its numerous acolytes.

Slightly different is geography. Geography began indeed as the study of the earth's surface, but it soon advanced to a consideration of the territorial distribution both of natural and of social phenomena. As such it is in an excellent position to analyze the interaction between man

and his social heritage, on the one hand, and the natural environment, on the other. Through this description and analysis it is of great importance to the social sciences, enabling them to explain the regional peculiarities of human societies and institutions.

While biology and geography started out with no thought of man, the second group of the sciences with social implications was virtually limited from the outset to man. Although the scope of medicine has been extended to animals, it is still today overwhelmingly a human science. While, however, it necessarily deals with the health of the individual, medicine also has traversed the same double phase as some of the other cultural sciences. More and more does the physician realize that disease is in part a product of social forces. Moreover the reciprocal influence of individual and group is being increasingly attested by the newer development of social hygiene and public health. On all sides we are today confronted by the social implications of medicine.

Linguistics, in its social scientific aspects, has had a somewhat checkered career. With the development of comparative philology in the late eighteenth and early nineteenth centuries, it was widely assumed that language afforded an adequate clue to the dispersion and ultimate distribution of the races and the diffusion of institutions. Under late nineteenth century criticism the claims of the comparative philologists to authoritative interpretation of prehistoric movements of the peoples were much abated. Linguistics remains, however, an important instrument of social scientific inquiry. Judiciously employed, the history of words often sheds light on the history of institutions and modes of thought. The economist, the lawyer, the politician, the historian who neglects to arm himself with the panoply of linguistic science shows that he does not fully comprehend the possibilities of his own discipline.

Finally we come to the realm of art. It goes without saying that art as creative activity stands in contrast with science, whose objective is analysis and understanding. But artistic creation is dominated by values and these are, at least in part, of social origin. In the history of art there is much that helps to explain social institutions, and vice versa. No one who wishes to understand the operation of social laws in the modern world can afford to overlook the evidence offered by the arts.

EDWIN R. A. SELIGMAN

II

Greek Culture and Thought

I. EARLY GREEK CULTURE. The institutions of the ancient Greeks first appear, in a form tangible enough for historical consideration, in the Homeric poems. Although the picture of Greek society there presented is not a unified one, in general it may be called a tribal society in the process of evolution into more elaborate state forms. There were many tribes, each led by a king (*basileus*). The kingly office was hereditary and the kings claimed divine sanction for their rule. Nevertheless the Homeric kingship retained certain features of the more primitive type of tribal chieftainship with which the Greeks had entered the peninsula. The *basileus* was leader of the warriors of the tribe in their forays or larger military enterprises. In the field of war the military divisions were by brotherhoods and by tribes. The council of the king was still called "the council of the great-hearted elders"; but it is apparent that the more primitive stage of tribal organization, in which the council was actually composed of old men, was past. Its membership included chiefly active younger men who represented a nobility of landed gentry among the tribal warriors. In some parts of Greece the more primitive organization, in which the advisory council of the *basileus* was composed of actual elders of the tribe, persisted far into a period when most of the Greek states had long passed beyond the tribal stage. This was notably the case in Sparta, where the institution of the *gerousia* (composed of *gerontes*, old men over sixty years of age holding office until death) continued even into the Hellenistic period. Aristotle in his *Politics* criticized this Spartan institution from the standpoint of its life-tenure principle because of the danger arising from "intellectual old age." The duties of the council in Homeric society were still essentially primitive tribal. In war time its members formed an advisory board of strategy to the king. In times of peace it assisted him in composing disputes between tribe members. Throughout the *Iliad* and the *Odyssey* the power of the tribal kings was strictly limited by the necessity of putting all important questions before the assembly (*agora*) of the tribal

warriors for its approval before taking action.

In three respects the original tribal ideas of the early Greeks determined the evolution of Greek political institutions throughout the period of the preeminence of the Greek city-states in the political life of the Mediterranean world. These are: (1) the idea of citizenship as a privilege inherent in the descendants of the tribe members by right of birth; (2) the nomenclature of the divisions of the citizen body into tribes (*phylai*); (3) the persistence of the conception that ultimate sovereignty reposed in the citizen, or tribal, members of the state, who delegated executive authority to selected members of their number at the meetings of the assembly.

In the Homeric epics there is a distinct artistic effort to hold fast, as far as possible, to obsolete and archaic conditions of life which were fast disappearing when the poems were attaining their final form. Despite this archaizing tendency the life as there represented was, in the main, that lived by the Greeks in the period stretching from 1000 to 800 B.C. Villages and towns were appearing everywhere. Economically the Greeks of the Homeric period carried on exchange of goods by barter. Trades had already become specialized, without any noticeable specialization of craftsmanship within a given trade. Distribution of the products of the skill of carpenter or metal worker was strictly local. Prior to the Homeric period, at the time when the Greek tribes were slowly moving downward into the Greek peninsula and fusing with the pre-Greek population, the countryside of central and southern Greece was dominated by strongholds, heavily fortified with stone and placed upon hills. These were the "Mycenaean" palaces, so well known from the excavations at Mycenae and Tiryns in the Peloponnesus. They had afforded the subject population a refuge from attack by wandering tribes on land or by pirates from the sea. As the Greeks took over the rule of the country, these fortified palaces became in some instances the centers of their tribal rule and the seats of their local governments. Where the Mycenaean

strongholds were destroyed in the struggle with the invading Greeks they nevertheless suggested to the new people the form of the simpler fortified refuges which they, in turn, established.

During the course of the two centuries (*circa* 1200-1000 B.C.) which precede the Homeric period, occurred the eastward and south-eastward expansion of the Greeks which ended in the occupation of the islands of the Aegean Sea and the western coast of Asia Minor. In this expansion into areas occupied by alien peoples the early bands of Greeks were of necessity compelled to establish themselves in the walled towns which already existed there or to construct the fortified refuges with which they had already become familiar on the mainland of Greece. These are the impulses which determined the physical setting for that important political institution, the city-state (*polis*), which characterized Greek political life and determined in considerable degree the cultural development of Greece throughout the classical period of its expression.

In its use by the ancient Greeks the word *polis* developed two distinct and separate meanings. It was the physical city, a group of private dwellings and public buildings concentrated in a given area; but in its meaning of "city-state" it was a political concept, a state form containing several essential ideas. The *polis* as a state might cover a considerable area; but the center of this state and the seat of its rule lay in the physical city with its enclosing walls. It must be a "free" state externally, in the sense that it had the right to live in accordance with laws of its own making. The characteristic feature of the Greek landscape is its valleys lying like bowls, the sides of which are mountains. The opposite slopes of these mountains again form the inner rim of similar bowls on the other side. It was this peculiar geographic conformation of the Greek peninsula which determined the fact that the area of the Greek city-states was usually so restricted. Within such an area, sharply delimited by nature, the towns and villages tended to unite to form one state. This actually occurred in Attica where the three divided plains which constitute geographic Attica early united to form the city-state of Athens. It occurred similarly in Laconia where the city of Sparta united a large territorial area into a single city-state. In other plains just as sharply delimited by nature, as in Boeotia, unity of the entire area into a single *polis* could never be maintained for long because of the tendency

of each town to assert its right to a free and autonomous life. In the western parts of Greece, such as Aetolia and Acarnania, there was no urban development until very late in Greek history. In these and other backward parts of Greece village life and primitive tribal organizations persisted. Throughout the history of Greece, therefore, we find side by side tribal states with village grouping and tribal states with a civic center, i.e. city-states. The desire for complete autonomy was equally characteristic of the two types.

There are no data regarding many important problems of the early history of those Greek-speaking tribes which came from the north into the Balkan peninsula and by assimilation with the native population formed the Hellenic people of ancient times. Information concerning the intermarriage of the Greek-speaking tribes with the natives is irretrievably lost, and with it all knowledge of its social results. It is clear from the Homeric poems that the economic basis of the resultant Greek life was primarily agricultural; but the Homeric Greeks were already sailing the seas. What the new conditions were which impelled them into navigation we can only guess. The fact of a colonial expansion from the Greek peninsula, extending from about 800 B.C. to 600 B.C. in its intensive period, is known from Greek tradition and from the results of that movement. In the space of these two hundred years the Greeks had rimmed with agricultural communities and trading towns the Black Sea, the Thracian coast, much of the coastal area of Italy, Sicily and southern Gaul, the eastern littoral of Spain, with occasional outlying posts on its south coast. They had established a Greek trading community at Naucratis, on one of the mouths of the Nile. At Cyrene in Libya they had a strongly entrenched colony. The causes of this colonizing activity must have been many. In the Greek peninsula the earliest colonies were presumably due to relative over-population in a land which was four-fifths mountainous and therefore restricted in its possibilities of food production. In the cities of the Asia Minor coast, industry had developed early. There the need for raw products, as well as markets, determined that the colonies sent out, notably by the city of Miletus, should be from the outset trading posts rather than agricultural communities. With the development of industries in the homeland of Greece itself, the requirements of a growing industrial production and commerce soon be-

came the dominating factor. In this connection the problem of relative importance—whether colonization determined the swing to industrial life in the home cities or the growing industrial trend at home motivated and caused colonization—is not possible of solution. The interaction of the two movements may be assumed as certain.

The results of this widespread colonizing activity were vital and constant in the material and intellectual development of the Hellenes. It gave invigorating contacts with new worlds and differing cultures to a people singularly receptive of new ideas and peculiarly gifted with ability to transmute these into modes of their own expression. It brought the Greeks a diversity of experience of men, of countries and of customs which must have affected them deeply; and it came at a fortunate time, when their own customs had not yet crystallized into set forms. There is no possibility of answering the question whether the exploits of these unknown adventurers of the sea were an expression of an intellectual restlessness and curiosity of mind already developed, or whether colonization is to be regarded as a factor in developing that exploring habit of mind which characterized Greek intellectual life for the succeeding four centuries. Greeks of the distant colonies were compelled to expend their energies in the necessary activities of a pioneering and commercial life, such as the building of cities and development of trade. Their cultural energy, as seen in the ancient temples at Selinus in Sicily, displays them as true Greeks in their architectural expression and in similar utilitarian applications of the native Greek sense of form. No outstanding names of colonists appear, however, in sculpture, painting or literature until about 500 B.C. Because of the practical requirements of colonial life and the greater cultural maturity of the eastern Mediterranean, the cities of the Aegean littoral were the first to draw the artistic and intellectual profit of the colonizing activity. After 500 B.C. and in the eastward expansion of Greek culture after Alexander, both western and eastern Hellenism of the *diaspora* came into its own in power of Greek expression.

Though the colonies of the period 800–600 were sent out by single cities, the relation of colony to mother city was distinctly not that of a dependent, or even of an inferior to a political superior. From the mother city the colonists took the sacred fire from the altar of the city god. They adopted from her their religious

cults and their festivals. As a rule they established a similar political organization, using the same tribal names. Often they used the same code of laws. But the colonists lost their citizenship in the mother city which they had left and became citizens of a new city-state. They took with them as the fundamental gift of their home environment the idea of the complete independence of their new home in its statehood. The colony did, however, acknowledge a filial relationship which might well determine its orientation on the side of the mother city in case of war. It granted to the mother city an indefinite religious primacy; but insistence upon actual political leadership was rarely sought or granted.

In many aspects of their civilization the Greeks formed a single people, unified by common religious beliefs and practises, and by the use of dialects of the same language which all could understand. They were all conscious of a cultural Greek unity as against all non-Greeks. These they classified under the one comprehensive term of *barbaroi*. Despite this feeling of unity they remained a people divided into hundreds of little independent states. Complete political disassociation was the normal condition among them and the ideal desired by each. Under the stress of external dangers which affected all these separate units alike and which seemed paramount to their constant local animosities, they could unite for temporary action. The danger once removed, the separative force of the tribal state ideal always disrupted the union thus attained. Several other forces within the Greek world tended to force the centrifugal city-states into larger or smaller unified groups. One of these was imperialism, under which the more powerful of the Greek states were constantly attempting to establish themselves in a dominant position (*hegemonia*) over less powerful neighbors. Economic or other social advantages also might motivate the subordination of city-state autonomy and the formation of larger and more comprehensive political forms. In the situation thus created lay a distinctive peculiarity of the political and social background of the Greeks in antiquity. A pan-Hellenic cultural unity existed, self-recognizing and acknowledged as well by the non-Greek world; but no single political organism of any permanence could develop out of the aggregate of city-states; and no Greek nation ever developed in antiquity.

Under this situation of city-state particu-

larism developed the variegated forms of cultural activity which have made the ancient Greeks stand out as so interesting a people. It is generally conceded that their amazing intellectual activity was in great degree conditioned by the intensity of the political life engendered in the autonomous city-state units. In that it rendered difficult any continuous political effort on the part of the Greek people as a whole, city-state disunion was also the source of the outstanding weakness of the ancient Greeks.

Neither in the political theory of the Greeks nor in their political practise did the constitution of the tribal state need to be of any one type. Throughout its history as an independent state Sparta, in its outward form, remained a kingship with two kings reigning side by side. Macedon assumed its position of leadership in the Greek world in the fourth century B.C. under a monarchic form of government. Under the absolute monarchy of Alexander and his successors Hellenic civilization was spread over western Asia and Egypt, the ruling dynasties being, for the most part, descendants of the old Macedonian nobility. But it is certainly true that the typical forms of Greek culture which have been admired by posterity were generated in the autonomous and democratic city-states.

In the Athenian state the lifelong tenure of military and executive leadership held by the tribal king had completely disappeared by 683 B.C. In its place appeared a collegiate body of magistrates, the nine archons, elected by vote of the tribal assembly for a one year term. The war archon (polemarch) was commander-in-chief of the military levies of the state. In the hands of one of the archons, distinguished as *the* archon, lay the executive authority in civil administration. Proof that this process of change in the Athenian state was one of evolution, rather than revolution, lies in the retention in the hands of the magistrate called the "king archon," of the religious leadership which had formerly been an attribute of the tribal king. The kingship had, presumably, not been abolished; but the king had been shorn of his important functions. In addition to these three archons six others made up the board. These were the lawmakers (*thesmothetes*) who combined the functions of judges and overseers of the laws of the state.

The disintegration and decentralization of the functions of the tribal kingship as it appears in the Athenian state were typical of a general movement common to many of the Greek states of the time, producing similar kinds of elective

magistracies. Although these varied widely in name and in the details of their functioning they show a basic similarity. Their typical features are: election by the citizen assembly, annual tenure, the collegiate form, and collegiate and individual responsibility.

Typical of the same period is the weakening of the tribal idea of government as manifested in family, clan and tribal action in the state, and the substitution in its place of corporate action of the entire citizen body. This movement may be designated as an evolution from primitive tribal ideas of government to comprehensive civic responsibility and action. Our knowledge of the codification of the customary civil and criminal law and procedure at Athens which is ascribed to Draco (*circa* 621 B.C.) is meager. It is sufficient, however, to show that the state had assumed in homicide cases the right of punishment which had formerly rested with members of the immediate family or of the brotherhood (*phratry*) of the victim. Certain rights in procedure and punishment were still left to the family and clan; and in criminal cases these social organisms continued to hold decisive rights of reconciliation and decision of penalty in minor particulars, even throughout the fourth century B.C. In Athens, and in other Greek states also, family and clan rights were still observed in the seventh century B.C., and were retained in obsolete form, but still as theoretical rights, into the time of Demosthenes. In this basic tribal right of family and clan groups in civil and criminal litigation lies the explanation of the strange fact that the Greek states, in the period of their development as autonomous political entities, did not provide for any public prosecuting agency representing the right of the state itself to initiate the processes of justice. This action continued to depend upon the unorganized initiative of individuals, whether of the family or clan, or any interested member of the entire group of citizens.

In the Athenian state of the seventh and sixth centuries political activity centered about the struggles of prominent clans for preeminence. A radical change in the structure of the state was made in 508 by Clisthenes, an Alcmeonid. In the place of the old system of voting under a division of the state into four primitive kin tribes, he substituted an artificial division into ten units still called tribes. Despite the retention of the name and concept of the tribe, this change denotes the passing of systematized voting on the basis of kinship and clan solidar-

ity. Membership in the ten new tribes was geographic, but under a distributive system in which three separate and non-contiguous territorial areas were combined in each so-called "tribe." In this process of redistricting the state for voting purposes, Clisthenes did not destroy the actual clans and phratries. They continued to exist, but only as religious and social organisms. Their retention was a concession, on the part of a leading political mind of that time, to the strength of the tribal feeling.

II. THE CITY-STATE DOMINATION. In the great congeries of Greek states in the fifth and fourth centuries hundreds of small polities existed, most of them with democratic governments. Where monarchies persisted, the powers of the monarch were limited by the electoral and legislative rights of the assembly of citizens. The tribal origin of Greek citizen privileges was everywhere maintained, under whatever form these states were organized. Citizenship was acquired by right of birth from citizen parents, sometimes on the paternal side alone, sometimes on both sides. Only by vote of the citizen body upon special cases could citizenship be extended to those who had not inherited it. In cases of great need the privilege might be voted to a group; but this practise was rare. As judged by the standards of the inclusive adult citizen privilege of modern democratic practise, the Greek city-states were actually organized as oligarchies. The correct approach to their understanding must, however, be from the viewpoint of the political practise of the pre-Greek cultural states of antiquity. By comparison with the absolute or the feudal monarchies of the ancient Near East the Greek experiment in government receives its sanction as political democracy and assumes its position of historical importance. The word *demokratia*, the rule of the *demos* (tribal citizen group), was coined by the Greeks; and they were the first people to establish any form of popular rule.

In their mode of operation these city-states were pure democracies, each citizen being compelled to come to a central place to cast his ballot in elections, to vote upon legislative matters of greater or lesser import or to determine questions of purely administrative routine, such as the sending of an embassy to another city-state. In the last case he must vote upon the number and membership of this embassy, upon the amount of its *per diem* expense account, and

empower one of the financial boards to make the required payments. The cumbersome and time-consuming character of the machinery of pure democracy was somewhat relieved by the fact that it operated on the committee system. The council (*boulē*) was in effect a committee of the assembly, elected annually out of the citizen body (i.e. the assembly itself), which put into completed form all matters for presentation to the assembly and arranged the agenda for its fixed and special meetings. In the more populous city-states where the *boulē* was large, a small offshoot of this body, customarily the councilors of one tribe, functioned as a subcommittee, preparing rough drafts for action by the full council. At Athens, as in many other states which copied the Athenian system, this subcommittee was called a *prytany*. When the assembly met to take final action, the council dissolved into the assembly of citizens, as under the usual committee system.

As a result of the lack of statistics for antiquity our knowledge of the relative numerical proportion which existed between the citizen bodies of the Greek polities and their total populations is a matter of approximations. For the Athenian state, which offers the best chance for a trustworthy estimate, a recent view of the composition of the population in 431 B.C. gives the following results: male citizen body over 18 years of age about 50,000; adult male metic population about 15,000. The total free population has been estimated at about 200,000. For the total slave population 80,000 to 100,000 has been taken as a conservative guess. On this basis the entire population of Attica would necessarily be put at about 300,000 persons.

The class of metics (co-residents) in the Athenian state corresponded to a similar group found in many other Greek states, although under different class names. They were men of families originally alien to the city which had admitted them to metic status. In case the family remained in the state the classification seems to have been hereditary, except in the rare cases of advancement of metics to citizen status. Metics enjoyed for themselves and their families all the protective rights held by citizens; but they could hold none of the state offices, neither could they vote or own real property in the state. They must each have as patron some citizen to stand as surety of their good behavior. They had to pay a direct metic tax of twelve drachmas for each man, six drachmas for each unmarried woman. In other respects they

were on a footing of equality with citizens, serving the city-state in its wars and taking part in all public religious festivals except those distinctly reserved for old tribal brotherhood and clan observance. No social grouping of metics is known. The conclusion is therefore warranted that they were completely assimilated into the state organization and were dominated, like the citizens, by the idea of devotion to the all-powerful *polis*. The metics at Athens, and probably in other Greek cities, were skilled laborers, small shopkeepers and street hucksters, or were engaged in transportation services. Building accounts of the construction of the Erechtheum for 409-408 B.C. give the following relation of contractors and workmen engaged: total 71, distributed as follows—slaves 16, metics 35, citizens 20. These figures may be taken as roughly typical of the general situation in the Greek urban commercial centers of that time, such as Chios, Samos, Corinth, Corcyra, Syracuse. States which had failed to move forward with the industrial spirit of the time (such as Sparta), and the non-urban, agricultural and more primitive states of western Greece, presented quite different conditions.

The acceptance of alien Greeks or of barbarians as protected subjects and the permission of continued residence granted to them were an outcome of the growth of industry and trade due, first, to the colonization movement, with its creation of distant markets demanding goods of Greek manufacture and supplying raw materials from central and northern Europe and, second, to the invention by the Lydians, in the seventh century B.C., of the use of coined money, first in electrum (natural mixture of gold and silver), then in gold and silver separately. This discovery was eagerly taken over by the Greeks. It spread rapidly in the sixth century in the handicraft industrial communities of the Aegean littoral and into the colonial markets, giving a new impulse to the industrial movement which had accompanied colonization by speeding up the processes of exchange. With the growth of the cities the complexities and exactions of administration increased. In the democratic movement of the fifth century the admission of all citizens, of whatever class, to all magistracies and administrative boards had been carried through. The time and the energies of the citizens were in some degree being consumed by the heavy task of ruling in their direct democracies, whether in electing magistrates or holding magistracies, or participating in legis-

lative meetings or in jury service. More consuming in time and energy was the citizen obligation of military service in the constant wars of the fifth century. These were the circumstances which explain the presence of so large a number of metics at Athens and in other industrial city-states, and the preponderance of combined metic and slave labor over citizen labor as exemplified in the Erechtheum building inscription. Other changes also followed upon the use of coinage. It changed the nature of wealth through the accretion in private hands of money surpluses. This in its turn hastened the passing of the collective economic system of the Greek tribal society and the political downfall of the tribal aristocracies whose wealth was based on land holding. In combination with colonization coinage tended to release latent individual energies and to transmute these into productive effort.

The same combination created an equally momentous change in the slavery system of the Greek world. In the agricultural-pastoral economy of the Homeric world field and household slaves appear, but they were relatively few in number. As the handicraft system spread in the Greek world, the Asia Minor cities first took over the industrial practise, long in operation in the Babylonian area, of using slaves in manufacturing. From the Asia Minor cities industrial slavery as an economic system spread into the Greek peninsula. With it and with the increasing wealth of individuals, household slavery progressed likewise; but this situation was prevalent only in the industrialized city-states. In the non-industrial communities where life was still largely agricultural, either free agricultural labor dominated or, as in Thessaly and Sparta, a helot system left no room for slaves.

Industrial slavery in the Greek world cannot be dismissed as a system bad in its total social and economic effects. From the humanitarian standpoint it seems not to have been so bad as the helot system, which in Sparta produced a tension between the master and serf classes resulting in a constant state of hatred and fear. One form of slave employment, that in mining and stone quarrying, was distinctly bad. Its evils lay in too long hours of work under trying working conditions. In individual cases the evils of mining slavery might have been deprecated, though the writer of the tract *On the Athenian Constitution* makes no mention of its bad features in his discussion of a reorganization of the Laurian mines and their use of

slaves. In Athens in the fifth century public opinion, if it had seriously deplored the evils of slavery in the mines, might have found expression through the medium of comedy or tragedy. The lack of such protest bespeaks the general callousness toward suffering characteristic of Greek and Roman antiquity. This callousness expressed itself in the legal provision which permitted the taking of testimony from slaves by torture.

The outlook for programs of social betterment through legislation was therefore limited within each Greek city-state. One organization in the Greek world is known to have constructed definite rules for amelioration of the savagery of war between the Greek states which were included in its membership. This was the Delphic Amphictyony. The amphictyonies were very old organizations of neighboring cities centering in some outstanding temple, and had originally been established for the better celebration of a particular worship through unified action. There were a half dozen of these in the Greek world. The functions of the representatives of the member states in the amphictyonies, who met at stated intervals in council, were to look after the protection and administration of the sacred land and other properties of the god, and to provide for the conduct of the sacred games. The representatives of the member states of the Delphic Amphictyony were required to take oath that they would not destroy any city of the amphictyony or cut it off from running water, either in war or in peace; and that, if any community adhering to the amphictyony transgressed the agreement, they would make war against that member and destroy its cities. The negative implication must be drawn from it that such practises were permissible in wars with all non-Greek peoples and with all Greek states not members of the amphictyony.

In other ways, also, the later forms of interstate relations between the different Greek communities betray their tribal origin. In primitive tribal thought the "outsider" is considered an enemy; and the Greek word for enemy actually means "outsider." But the stranger who appeared within the tribal territory and asked safe conduct and protection, with appeal to the gods, had to be accepted as a guest and friend (*xenos*). He was under the protection of the god and of the family which might have received him. When he returned to his own home a reciprocal and hereditary re-

lation of "guest-friendship" had been established between his family and that of his protector in the foreign state. This is the situation which existed in the time of the Homeric poems. With the great increase in intercourse and movement of traders which colonization brought, the custom of "guest-friendship" between the subjects of different states became a regulated and recognized feature of Greek life. Just as in the case of the metic, the stranger temporarily domiciled in another state for trading purposes was required to have the protection of a citizen. When such guest-friendship had not been established between the family of the stranger and some citizen in the foreign state, the stranger had no legal status. To meet this situation there arose the *proxenia*, a system in which some one citizen stood "in place of guest-friend" (*pro-xenos*) to all visiting aliens from some one city-state. So Alcibiades was guest-friend to all Spartans who might come to Athens. In the fifth and fourth pre-Christian centuries the proxeny system gave way before the custom of establishing definite commercial treaties and treaties of friendship between city-states, with recognized mutual rights of freedom of visit and intercourse for the members of the two states; and in the many proxeny inscriptions which have come down to us after that time "guest-friendship" has become a mere honorary title bestowed by the city-states upon aliens who had in some way been of service to them.

In Greek social life the ideas of the maintenance and solidarity of the family, which is the basal unit in clan, tribe and state, play an important part. Aristotle in his analysis of the *polis* as physical city recognizes the ascending series of house, village, city. On the political side his series is family, tribe, state. As far back as historical research can trace the Greeks they were monogamous, and complete control of the family and household lay in the hands of the eldest of the family group. In view of the tribal basis of citizenship it lay in the interest of the Greek state to preserve each citizen family, so that the number of citizen families both for religious and for political reasons might be maintained. Out of this fact arose a peculiar provision regarding female inheritance. The inheriting daughter of a deceased family head who had left no living sons might be claimed in marriage by the next of kin. Upon the girl it was a legal obligation to marry a man of her father's blood as near to her as possible. The

paternal uncles of the girl and their sons, in a definite series, were obligated to undertake the marriage of the heiress. According to the laws of Gortyn in Crete of the sixth century B.C., greater right of selection was left to the woman. If she agreed to renounce one half of the inherited property to her male next of kin, she might herself make choice of her husband, but within the circle of the clan of which her family was a part. In the greater legal freedom of women which is to be noted in this Cretan law, there may be preserved a characteristic of the culture of the pre-Greek, or "substratum," people of Crete. The wall paintings of the Minoan palaces of Crete certainly portray a life in which the social conventions applying to women were less constraining than those prevailing in the Greek cities of the fifth and fourth centuries B.C.

A complete household, according to Aristotle, consisted of the father, wife, children and slaves. The father of the family was lord of the household. He was guardian and representative of all the family members before the state and before the gods. The oversight of the household cult lay in his hands; and he was the legal representative of wife, slaves and minor children. He had the power to determine whether a newborn child should be exposed, that is, whether it should be left either to die or to be picked up by a passer-by and raised as a slave, unless proof of free birth could be brought forward. Exposure was more frequent in the case of female infants than in that of male, both for economic reasons and for purposes of family continuation. The complete sway of the family head over his household which characterized early Greek relations was somewhat curtailed in the period from 800 to 500 B.C. as a result of the growing power which the state assumed as against the family and the clan. Such curtailment is seen in the legislation of Solon in 594 B.C. to the effect that when a male child had once been formally presented to the state by the citizen father, the father thereafter lost to the state the right of life and death. There remained to him still, however, the right to assign a minor child for adoption into another family. Moreover he had the power, in case of grave disobedience, to thrust a son out of the family organization, but only by public announcement through a herald.

The position of women in Greek society of the sixth, fifth and fourth centuries was on the whole an inferior one, both legally and socially. The explanation of this fact is to be found in

the original tribal structure of the Greek state, which resulted in a heavy emphasis upon the continuation of the family and tended to make marriage an institution destined to that end, and women the necessary instruments for the maintenance of the family life and its economic fortune. Greek women had no independent status in court. Married women were represented in court by their husbands. A divorced wife or a widow who left the house of her dead husband returned immediately under the protection of the head of her own house. In case a widow remained in her husband's house she became subject to the legal representation of her eldest son, who upon his majority assumed control of his mother's property. Divorce, like marriage, took place without the need of any official intervention. The husband could bring it about by the simple process of sending his wife away; the wife could leave her husband at will, although at Athens she was legally required to announce the fact before the archon. In Sparta childlessness of a wife was sufficient ground for divorce. There were, however, many ameliorating circumstances. The dowry which a wife brought with her in marriage was protected for herself, though customarily the usufruct of it went to the husband. In case of divorce, under ordinary circumstances, it was returned to her. In the sixth century laws of Gortyn the divorced woman received, in addition, a half of what her dowry had earned. Within the household the position of the legal wife could be both honorable and important. Among the poorer citizen classes the position of women was much less subject to restricting conventions than among the well-to-do. As free economic agents the wives of the poor appear in the markets selling vegetables or engaging in similar work. Even with respect to the upper classes it must be said that the grave monuments of the classic period and the tone of the Athenian drama of the fifth century speak strongly for the assumption that the actual position held by Greek women was considerably higher than the legal recognition of them would imply.

It is not possible to formulate any general characterizations of the economic life of the Greek world for the entire period from 700 B.C. to the conquest of western Asia by Alexander. The changes which took place in this long period were great, the local diversities which appear at any given time quite marked.

Certain features, however, seem fairly definite. The trade of the Greek world after the

seventh century encompassed the entire Mediterranean littoral. It was largely sea-borne trade. Transportation of goods and travel of persons by land were much more costly than by sea. Indeed it is one of the marked and constant features of the Greek and Roman civilizations that they remained thalassic, rimming the Mediterranean Sea, and that they tended to confine their expansion, both military and cultural, to its shores and hinterlands. The two persons who departed from this tendency were Alexander the Macedonian, in his conquest of western Asia, and the Roman politician Julius Caesar, in his conquest of Gaul and in his foreshadowing of the Roman expansion into Britain. It was for this reason, and by virtue of the consequences of their break from the traditional intra-Mediterranean viewpoint, that these two lives must be regarded as pivotal points in the political and economic history of antiquity.

In the sixth century the Ionian coast of Asia Minor was the chief center of handicraft industry in the Greek world. In the fifth century the center of gravity of manufacturing and of trade had shifted to certain cities of the Greek mainland. Two causes stand out as important in this movement. The first was the long continued war of the Greek cities with the Persian Empire, which was almost constant during the years 500-448 B.C. and brought about a considerable lessening of the trade with the East by way of the Ionian cities. The second was the great expansion of the Greek markets in the western Mediterranean in the sixth century. Among the mainland cities which reaped the benefit of their central position in the Mediterranean and Black Sea areas of Greek commerce were Corinth, Aegina, Megara and, above all, Athens. Inter-Greek politics and wars of the fifth century are marked by an increased emphasis, which was thoroughly conscious of its methods and aims, upon economic relations both in war and in peace. Particularly Athens, under the leadership of Pericles, maintained its sea power partly in the interests of the commanding economic position given to it by its hegemony over the Delian League. In the fifth century Athenian ships carried the bulk of the trade in the Aegean and Black Seas. After the Persian expedition of Xerxes in 480-479 B.C. Athens made a strong bid for the trade of the West. This brought the Athenian state as a strong competitor into the sphere of trade formerly controlled by Corinth. The clash of their economic interests is one of the tangible and

immediate elements in the growing feeling of hostility to Athens which brought about the Peloponnesian War. In respect to the Athenians a pamphlet of the period makes this statement: "They alone can have the riches of the entire Hellenic and non-Greek world. For if any state is rich in woods for ship building, where may it dispose of these, unless it persuades the ruler of the sea? If any state is rich in iron or copper or flax, where may it dispose of these unless it persuades the ruler of the sea? Indeed for these very reasons our ships are built." As compared with the fifth century, the fourth century was marked by a decrease of the trade of the urban centers of Greece itself in the western markets, caused by the development of local handicraft centers, especially in Italy. This constriction of the western trade sphere must be regarded as one of the contributing pressures which resulted in the invasion and conquest of the East by Alexander.

The variety of the articles of trade which came into the harbor of Athens, and some indication of the districts from which they came, are obtained from a comedy produced in the early years of the Peloponnesian War: "From Cyrene the ships bring us silphium stalks and cowhides, from the Hellespont tunny and all kinds of pickled fish, from Italy groats and ribs of beef. . . . Syracuse delivers pigs and cheese. . . . Egypt contributes sails and papyrus rolls; Syria, incense; lovely Crete, cyprus wood for the gods. In Libya ivory is to be bought. From Rhodes come raisins and dried figs that cause sweet dreams, from Euboea pears and apples, slaves from Phrygia, mercenaries from Arcadia, no-good servants and branded rascals from Pagasae [a Thessalian harbor], chestnuts and almonds from Paphlagonia. . . . Phoenicia furnishes dates and fine flour, Carthage, carpets and colored cushions." From this and many supporting sources it is clear that the industrial urban communities, of which Athens is the outstanding example, lived upon foodstuffs imported chiefly by sea. These cities exported in return the wares of their weaving, ceramics and other industries, whether produced in the homes of the craftsmen or in small hand factories. The largest manufacturing industry known to us was that of a shield maker in Athens which busied 120 workmen. This was exceptional. There must have been many small industries in Athens and the Piraeus which employed from ten to thirty workers. There was distinct specialization in industry, each shop

turning out objects of a single type such as shields, helmets, shoes, chitons or the like. Specialization of function within the craft occurs, as between potter and painter in ceramics, and cutter and sewer in sandal making. Training in craftsmanship was by the age-old apprentice system. This applies equally to training for medical practise, which was classed as a craft (*technē*), as were also sculpture and painting. A separate designation for the "professions" did not exist.

The area of Greece itself which can be successfully cultivated is about one fifth of the whole peninsula. Its soil, as compared with that of Sicily or that of the fertile valleys of western Asia Minor, is poor. With the colonization movement, as the handicraft industries grew in the Asia Minor cities and in those of Greece proper, grain was imported, constantly in greater amounts, from lower Russia, Egypt and Sicily. Small farming of grains still maintained itself in Greece, rotation of crops being by the two-year system of alternate planting and fallow; but grain production in peninsular Greece could not well stand against the competition of the more fertile terrains accessible to colonial shipping. A change to olive culture and the manufacture of olive oil for the colonial trade, as in Attica, and wine production, as in some of the Aegean Islands and on the coast of Asia Minor, brought a welcome relief in the fifth century to agricultural life in the older city-states centering about the Aegean. At the beginning of the fourth century a more scientific handling of the soil (advocated in books upon the subject), a better knowledge of the use of manures, a change by the more intelligent farmers to the three-field system of cropping, gave a renewed but temporary impetus to agriculture, even on the mainland of Greece. For the most part, however, the picture of Hellenic economic life from 600 to 300 B.C. shows a constant increase of industrial production, a gradual decrease in the importance of agriculture, a growing dependence upon grain raised by non-Greeks and increased difficulty in feeding the growing city communities. However much the political theorists might advocate the self-sufficient city-state as an ideal, its day in the progressive parts of the Greek world had passed.

Greek culture assumed its characteristic aspects in the fifth and fourth centuries. Whatever local differences may be established for the various Greek tribal groups and for the many

city-states, two elements characterized the religious attitude of all the Greeks. The first was that there was no state worship, in the sense of a pan-Hellenic religion to which all Greeks must subscribe, or any single and exclusive religious worship in any one city-state. The second was that the Greeks showed an amazing degree of tolerance, along with a keen intellectual interest in all religious questions, both tolerance and interest remaining with them throughout the period of their cultural greatness. When the Jew, Saul of Tarsus, presented his new religious doctrine at Athens he could still count upon a Greek audience imbued with religious interest and tolerant to the point of willingness to debate the question of resurrection from the dead.

The Olympian hierarchy of anthropomorphic gods had been formulated by Homer and Hesiod. The Homeric epics and Hesiod's *Theogony* spread through the Greek world as a common Hellenic literary heritage. As these poems became known their gods were accepted as outstanding deities common to all Greeks; and locally one or the other of these gods became the particular deity who protected each city-state and received particular worship as the distinctive deity of that community. They paid the penalty of their origin by becoming poetized creations, with no more religious sanction than could be given in poems which never became a sacred literature and could not lay claim for their teachings to any authority of religious revelation. Religious sincerity must be granted to the city-state cults. It is expressed in the fifth century in magnificent temples, in expensive processions and above all in the dignified statues of the gods created by Phidias and other sculptors of his time. Nevertheless the devotion and worship given to these gods was paid to them as symbols of the glory and the power of the city-state, rather than as deities. Spiritually the small local deities worshiped by the common people struck much deeper. In them and in certain ecstatic worships such as Orphism, the Dionysiac worship and the Eleusinian mysteries, the fundamental religious feeling of the Greeks more truly expressed itself.

In most of the pre-Greek civilizations of western Asia had developed a caste of priests who, as holy men, stood in a closer relation than the layman to the deities whom they represented. In Egypt the Pharaohs were identified with God. The government was theocratic. In marked contrast with this stands the

Greek religious attitude. The priests of the Greek states were mere magistrates, annually elected by and out of the citizen group. The appearance of priestly states is therefore foreign to Greek politics. The Greek religions developed no dogma which each believer must accept. This helps to explain the religious tolerance which was characteristic of Hellenic society. It likewise helps to explain why the Greek religion was so quickly and vitally changed after the conquests of Alexander and the penetration of all western Asia by the Greek spirit. Lacking a common religion believed in by all the Greeks, lacking a sacred book, lacking a theological dogma, lacking the established sanctity and the corporate and vested interests of an old and powerful priesthood, the Greek *polis* religion was altered toward the spirit of the older oriental religions, in which these elements were long and deeply rooted.

In the Homeric poems all of that body of legal customs which had grown up in the Greek tribes to meet the requirements of tribal community life were referred to divine origin. Beside Zeus sat the goddess Themis as his adviser, who was responsible for divine ordinances called *themistes*. During the clarifying movement of the seventh century single lawmakers were empowered in many of the city-states to arrange the laws which were to govern the community. These men were sometimes founders of constitutions and thus originators of public law, sometimes codifiers of customary law. Although the conception of Greek law still retained something of the idea of supernatural origin, a new term arose to express the idea of "justice," the body of rights which appertained to the individual on the basis of the *themis*. This included both natural law (the unchanging laws expressed in the will of the gods) and man-made rules of the social group. These latter rules, originating from men and subject to change by them, could not retain the ideas of changelessness and inviolability. Nevertheless they expressed the sense of "justice" as the will of the tribal citizen body, namely the *polis*. They arose during a period of development from communistic tribal ownership to that of private ownership of property, which attended the change from tribal to *polis* organization. Formulated in a period also marked by the struggle of the lower citizen classes for the right to hold the magistracies, they tend to express restraints imposed upon the *polis* magistrates in their application of the

law to the conduct of the citizen body. Just as the Homeric Greeks personified Themis as a goddess, so the Greeks of the sixth century personified the abstract idea of the laws by which the *polis* was ruled as *nomos* (the law) which incorporated both the idea of the state and the idea of justice for which the state stood.

The complete sovereignty of the laws of the *polis* was expressed about 475 B.C. by the Boeotian poet Pindar in the phrase: "Law (*nomos*) is king over all things." The necessary subjection of the individual to *polis* law and the possibility of a conflict of its dictates with the unwritten custom of divine law gave to Sophocles the artistic motif of his drama, the *Antigone*, written and produced in the middle of the fifth century. The feeling of complete submission to the state and its *nomos* was also expressed upon the tombstone of the Spartan citizens who met their death at Thermopylae with Leonidas in 480 B.C. Though the sacrifice they made was futile as a military measure, it was necessary and unquestioned because it was in "obedience to the orders" of the Lacedaemonians, that is, of the Spartan *polis*. In acceptance of this view of *nomos* as the expressed will of the state, conceived as an ethical entity working to the end of justice, in 399 B.C. Socrates met his death with calmness, despite a personal conviction of guiltlessness. The idea of the *polis* expressed by Pericles in his funeral oration delivered in 431 B.C. (Thucy. II 34-46) has the same ethical content; and in the political teaching of Plato and Aristotle the state is the highest instrument and expression of justice, demanding and setting the environment for the individual morality of its citizens. It is true that only the outstanding thinkers of the late fifth and fourth centuries attained to and held this idea of law and statehood. The sophistic teaching of the individual as the source and norm of ethical standards helped to undermine its validity; and in the period of the completion of the democracy the voice of the *demos*, the concrete group of individual citizens, became dominant over the idea of the abstract "law" as ruler.

Among the separatistic city-states of Greece no general body of Greek law could develop, but a marked tendency is noticeable in the fifth and fourth centuries toward standardization in Greek law through the acceptance of the law codes of the mother cities by the colonies and the practise of many city-states of adopting special features of the laws of some one city. In the Delian League of the fifth century the

code of private law of Athens became the model for many of the cities of the league. A recently discovered papyrus has shown that even in Alexandria in Egypt, founded in 332 B.C., features of the Solonian constitution reappeared in a body of laws applying strictly to the city of Alexandria. Modern jurists are therefore justified in dealing with the city-state codes under the comprehensive term of "Greek law," as embodying certain principles generally accepted by the Greek world. In the period after Alexander the effects of the native law, and the process of amalgamation of Greek legal ideas with those long rooted in the countries then ruled by Macedonian dynasties, resulted in a differentiation of the codes into Syrian-Greek in the Seleucid Empire and Egyptian-Greek under the Ptolemies. The commercial city of Rhodes, however, developed in the Hellenistic period a code of the law of the sea and interstate commerce which was generally recognized throughout the Greek world.

The pan-Hellenic feeling of cultural unity never developed sufficient strength to produce either a pan-Greek nationalism or any great degree of pan-Greek patriotism. The fear of a common loss of freedom might at times unite a large part of the Greek world in defense of interests shared by all; but such unified action was always sporadic and temporary and the feeling of unity which a great crisis might have evoked was quickly dissipated when the danger was removed. The only patriotism which the Greek of the classic period felt or expressed was that toward his city-state. This, however, was intense and absorbing. It finds its highest expression in the words ascribed by Thucydides to Pericles in his oration over the Athenian soldiers who died in the year 431 B.C.: "Such is the state for which these soldiers have died in battle, in consequence of their noble decision not to be bereft of her; and for those of us who survive it is fitting to endure any labor in her service. For this reason I have enlarged upon the character of our state, in order to make clear that our struggle is of far greater moment than the contest imposed upon those who do not share in equal degree in such an inheritance." In the Periclean funeral oration the military glory of Athens is as clearly grounded in her victories over Greek enemies as in those over the hereditary non-Greek enemy, Persia. The Athenian teacher Isocrates in 380 B.C. wrote a pamphlet calling for unity of all the Greeks in a common war against Persia. There are two

essential elements in his discourse: the first, that such a war was the best way to meet an economic-social situation in the Greek world; the second, that *his* state, Athens, had a more legitimate claim to the leadership in such a war than her rival Sparta. Pan-Greek patriotism was not involved. The young Macedonian king, Alexander, inherited from his father a league of the Greeks with the war against Persia as its first objective, and this was formulated as a pan-Greek ideal. The Greeks supported it only grudgingly and through force. Before his death Alexander himself seemed to have substituted in its place a new conception, that of Greeks and "barbarians" as coworkers in a state the culture of which was to be grounded upon Greek elements. Throughout the period of the preeminence of the city-state a pan-Hellenic cultural consciousness existed in the Greek world; but it was a feeling not comparable to modern nationalism. It lacked the element of religious unity found in modern nationalism; it lacked entirely the modern romantic element of love of country in the sense of the land and its scenery. Its devotion was civic. Its love was for the city-state as a political form and for the physical city through which it functioned.

Emphasis upon "individualism" as a marked characteristic of ancient Greek life has become almost canonical in the discussions of many of its best equipped exponents, with a few dissentient opinions. Greek culture must be depicted as highly diversified, but with a uniform background. As viewed from the standpoint of the city-states as corporate units, diversities must be conceded which may be classed as individualizing. In the funeral oration delivered by Pericles in 431 B.C. he makes claim to an individual character and to superiorities of the Athenians and of Athens as against other Greek communities. The comparison with Sparta, which was in his mind, does indeed justify the recognition of two entirely different group ideals as to the place of the state and of its citizens in the economic and political life of the time.

In the sense of a theory of the extreme rights of the individual citizen as opposed to the state, the term "individualistic" cannot fairly be applied to the Greeks of the fifth and fourth centuries. The Greeks did not at any time conceive the legal idea of a group of unassailable rights inherent in each personality, apart from the state. The only freedom possessed by each citizen was political freedom, which came to

him through his participation in the freedom of the state. Preeminently in the fifth century, and still in marked degree in the fourth, the Greek citizen was willing to subordinate himself and his interests to the needs of the *polis*, whether this subordination was to law (*nomos*) or to the group action of the citizens as the *demos*. As a striking example of this the liturgies may be cited. In undertaking the liturgies the wealthier citizens voluntarily took over the expense of maintaining certain public services such as the fitting out of a war vessel for the state, supplying the gymnasia with sand and oil, or training and fitting out the choruses in the dramatic productions at the religious festivals. In the Greek political theory this characteristic attitude toward the relation of the individual to the state is apparent. Within the limits of this subordination of the individual to the idea of the state a great measure of personal freedom, both in thought and in action, was permitted the individual in most of the Greek communities, whether citizen, metic or slave. In Sparta, however, the peculiar conditions of a state organized on the lines of a military body demanded a greater measure of state control as against the individual. But even in the Spartan state and in the city-states of Crete, where a degree of communistic action was developed which differentiated these political organisms from the majority of the Greek communities, the importance of outstanding individuals in determining the course of the political and cultural history of the social group is always evident. The conditions of Greek political and social life in general were such as to give to individuals of marked capacity in all lines a wide scope of expression for these capacities. It is significant that few of the names of the architects of the old Pharaonic temples have come down to posterity. Imhotep, the architect of the *mastaba* of the first dynasty of Pharaoh Zoser, a thoroughly historical individual known to us by a contemporary seated statue, soon lost his human individuality in a divinity which in the Hellenistic period equated him with the Greek god of healing, Asclepius. But scores of names of Greek architects, sculptors, painters, musicians and authors have become fixed in the Greek cultural tradition, and their names and works have been handed down with full appreciation of the particular contribution of each to the technique of his craft. Even in the sixth century this importance of the individual is emphasized in the case of potters and vase painters, the names of both

artists often appearing upon the vase, as on the sixth century François vase in Florence—"Ergotimus made me. Clitias painted me." It is seen in the proud words which opened the *Descriptive Geography* of Hecataeus (*circa* 500 B.C.): "Hecataeus of Miletus speaks thus; I write these things as they seem to me to be true. For the stories of the Greeks are of many kinds and ridiculous, as it seems to me." It is this trait—recognition of the value of the social effort or opinion of the individual of whatever social, political or economic rank he might be—which particularly distinguishes the Greek social experience from that of the peoples who preceded them, and in lesser degree from that of the Romans who followed.

This personal freedom of thought and action is based on the practise, if not the theory, of *laissez faire* in economic and social matters on the part of the *polis* respecting its citizens; on the general lack of pressure of theological dogma on the expression of personal conviction; on a relatively high state of prosperity in the cities engaged in handicraft production in an expanding world of commerce; on the fact that there was no marked social class with exceptional privileges in the industrial cities of this type and that there were marked equality and fluidity of social status, though not of political status, between the classes of slaves, alien residents (metics) and citizens. Equally favorable social conditions did not obtain, however, in the agricultural communities, such as Sparta and Thessaly, which were founded upon the system of exploited serf labor. It was the good fortune of the Greeks that these conditions existed first for them, among all the peoples that have taken part in the development of the civilizations of western Asia and of Europe. It was their merit that they produced a surprising number of able individuals at this particular time. In many fields they were the first to express in written and lasting form things that other individuals may have thought in earlier times. Their enthusiasm, their passion of earnestness, their optimism as to the validity of their reasoned conclusions, are grounded in their priority in expression. It is these qualities of Greek cultural expression which have produced the romantic attitude toward the "joyousness" and the "eternal youthfulness" of the Hellenes of the classic period. The contrary observation that other qualities have dominated the thought of individual Greeks has given rise to an opposed theory, that of the essential "melan-

choly" and "pessimism" of the Greeks. Both views are equally right and wrong; and both have tended to be panegyric in their modern expression.

The claim may successfully be supported for the Greeks that, as distinguished from their predecessors, they introduced into the world the scientific habit of mind. The pre-Greek peoples made many keen observations, and assembled a considerable body of empirical knowledge. They also applied this knowledge to the solution of the practical difficulties which confronted them. Individuals among them likewise approached their problems with marked powers of deduction and an ideal of systematization. Notable among such individual examples is the work of the Egyptian doctor who wrote the famous Smith medical papyrus (in the collection of the New York Historical Society) in the early part of the second millennium B.C. He made the heart the center of the human system, knew the places where the pulse beat could best be taken, organized and wrote down his observations and advice. But this is a single instance in the mass of magical formulae which predominate in the practise of Egyptian medicine. Greek physicians were the first to systematize medical knowledge, to insist that all diseases arise from natural causes, and to establish by observation of numerous recorded cases the probable course of a recognized sickness. Thus they formulated medicine as an empirical science. The Babylonians had assembled a considerable body of astronomical observations; but this knowledge was based on the notion that the gods determined the fate of human beings through the stars, and it was used in the service of astrology. The Greeks systematized their knowledge of the movements of the heavenly bodies and founded the science of astronomy. Where the Babylonians and Egyptians had chronicled consecutive historical events, the Greeks established history as a discipline dealing with groups of related events through the application of critical and recognized methods of approach. In place of the empirical mathematical knowledge which the Egyptians used, the Greeks made a science of mathematics by establishing its laws.

The first appearance of this tendency toward free inquiry and investigation, detached from all theological teaching, occurred among the Ionian cities of Asia Minor in the sixth century. Contemporary with this movement there appeared in the mainland of Greece a revival and

deepening of religious feeling which was unconnected with the public worship of the city-state gods, was peasant in origin and open only to the initiated few. This new religious current is shown in the rise of the Orphic and Eleusinian mysteries and the Dionysiac worship. All of these secret cults were characterized by their promise of a future life to the initiate, by their evangelistic character, by the idea of rebirth through the practise of rites of purification, by the belief in the personal approach of men to the gods in moments of religious ecstasy. Diverging sharply in their whole psychological and mental attitude from the tentative science of the Ionian school of thinkers, their ideas were nevertheless drawn into the movement toward scientific inquiry in the philosophic schools of Pythagoras and Plato. Well into the Christian era the Greek mysteries played an important role in the religious experience of the Greco-Roman world. The Eleusinian initiates had no congregation meetings and formed no social structure. Once initiated they scattered and were absorbed into their own state organizations, carrying with them the spiritual revelation which they had received. The Orphic worshippers, on the other hand, formed a definite social body, observing certain rules of abstention which differentiated them from their fellow beings. But from the societal point of view all the mysteries have one point of common interest and importance. All of them cut through the existing political, clan and family classifications of the time by admitting to initiation citizens, metics or slaves without differentiation.

The first evidence of the new Greek attitude toward the investigation of natural phenomena appeared when Thales of Miletus forecast an eclipse of the sun in 585 B.C. He was followed by a group of men who displayed the same interest in the fundamental problems of nature, and pursued the same general method of inquiry, with all its strength and also its inherent weakness: Anaximander and Anaximenes of Miletus, Pythagoras of Samos, Parmenides of Elea (in Italy), Empedocles of Acragas (in Sicily), Anaxagoras of Clazomenae (in Asia Minor) and Leucippus of Miletus (later of Elea). The insistent problems which they all attacked were these: What is the beginning and source (in Greek the *archē*) of all appearances in nature? What exactly is the form of the universe; and how did it come to assume its present form? In the varying answers which

they gave to these questions they substituted, in place of the mythological cosmology of the Greek religion, cosmic formulae based upon a considerable amount of observation and deduction and on free speculation. Their results agreed in the belief that the "beginning" was one material. They further agreed that this primary source, in whatever form it might appear to the senses, was material. To the earlier thinkers of the group this material was a sentient and dynamic thing, whether water (Thales), an undefinable stuff (the "unlimited" material of Anaximander), air, which by an inherent power of condensation and rarefaction formed the many appearances of nature (Anaximenes), or the sentient "fire" of Heraclitus, which was the god Zeus himself and was itself subject to the universal law of constant change. In the fifth century Anaxagoras was driven to separate sentient force from matter; this force he designated as mind (*nous*), an unemotional intelligence utterly disinterested except in the establishment of order in the universe. In opposition to this, which was potentially a dualistic theory, arose in the middle of the fifth century the school of the atomists, of which Leucippus was the originator, Democritus of Abdera and Diogenes of Apollonia his followers. Atoms moving about in empty space have, by an inward necessity, formed the universe as it is. This atomic theory was a purely materialistic explanation of nature, destined in the Hellenistic and Roman periods to furnish the cosmological foundation upon which Epicurus developed his philosophic doctrine and Lucretius his attempt to free the human mind from the specters of fear.

Out of this Ionian speculative use of intelligence came by divergent lines of development the philosophic systems of the followers of Socrates and an independent movement of strictly scientific thought. The cosmological speculation emanating from Ionia spread quickly, as the names and nativities show, to Italy and Sicily. In this fact are seen the cultural unity of the Hellenic world and the degree of mental intercourse then possible between men of higher intelligence. The movement is not characterized by group thinking. It came through individuals. Pythagoras alone established an actual "school," in the sense of a continuing group. In its replacement, by individual speculation, of the group prepossessions represented in the older Greek religious cosmology, Ionian natural philosophy

displayed quite clearly its scientific character.

Conditions of life as they existed for the Greeks of the fifth century B.C. favored the popularization of the new intellectual movements which had begun in the sixth century. Technical methods in production had become more refined. In all fields, whether economic, artistic or intellectual, the rapid flow of this movement into all parts of the Greek world is apparent. The tendency to use literature as a means of political propaganda or public instruction, which can be noted in the verses of Solon of Athens (594 B.C.), expanded enormously. Crude processional choruses had long been produced by local talent among the peasantry of Attica, and the Dorian communities at the harvest festivals, in which the participants, dressed as goats or satyrs, delighted their neighbors with rustic and ribald humor. Under the hands of the Athenian authors Aeschylus, Sophocles and Euripides, these impulses toward dramatic presentation of some episode in the life of the god Dionysus were refined into a new literary form, the perfected stage drama, called from its origin *tragoedia* (goat song). Its importance in this discussion lies in the fact that the stage drama became an educative force of considerable importance in Greek life and a valuable medium for the expression of public opinion. Often the dramatists included in their plays political comment on the questions of the day as they were being discussed in the streets and markets of the city of Athens. The development of drama was, at the outset, purely Athenian; but the reproduction of successful plays in other cities and their publication for reading purposes gave to the authors a wide scope of influence over the Greek world at large. Comedy, which also developed at Athens, became a medium of violent diatribe and ridicule of political personages, of intellectual movements, of political methods and programs.

The fact that official documents and laws were painted on whitened wooden panels or were cut on stone slabs, and the output of books on many topics, necessitate the assumption of widespread literacy in the Greek city-state organizations of the sixth and fifth centuries. It is therefore surprising to find that the city-states did not interest themselves in mental training or take any responsibility for it, even in the case of their future citizens. There were no public schools. For those who could pay the fees there were private schools, taking care of some hundred and twenty pupils at

times, as we definitely know in one instance. The only compulsion that rested upon a citizen to prepare a son for his place in the state lay in public opinion, feebly supported by a law, ascribed to Solon, that a son who had not been provided with an education was not under obligation of support when his father became old. The subjects of instruction were reading and writing and the learning by rote of passages from the poets, especially from Homer. Beyond this came the playing of a musical instrument of the harp or the flageolet type. In the field of bodily training, since every citizen's son was a potential soldier, the state provided definite open spaces, the gymnasium and the *palaestra* (wrestling ground), and trainers in wrestling, running and jumping, with an overseer of general conduct. Equipment was furnished by the state through the semi-voluntary contribution called the gymnasial liturgy. Specialized training for the trades (*technai*) was obtained through the apprentice system, by contract between father or guardian of a free boy or owner of a slave, and a master craftsman. This system prevailed also in those trades which we differentiate as professions. The practising physician, for example, was a teacher of his *technē* at a stipulated fee.

Nowhere, perhaps, is the effect of the scientific attitude already established in the speculative physical philosophies of the Ionians so clearly seen as in Greek medicine. The practise of treating disease had been carried by the pre-Greek peoples to a fair degree of effectiveness. The claim that the Greeks were the founders of medicine rests upon the fact that they systematized it upon a basis of accumulated and classified observations of the phenomena of disease and made of it a profession with an established social attitude and a code of ethical behavior. Two "schools," that of Cnidos in lower Asia Minor and that of the island of Cos, had already differentiated themselves in the fifth century upon the basis of method of treatment. Of the work of the Cnidian school we have little left except in the criticisms of their opponents of the Coan school. From the Coan school there has come down a considerable body of medical literature, assembled in the early third century by Menon, a pupil of Aristotle. The Cnidian school was said to overemphasize the value of diagnosis and treatment. The Coan followers laid stress upon correct prognosis and the psychological result of the confidence to be engendered thereby in the patient. Something

of the scientific character of Greek medicine at the end of the fifth century and the effect of its methods upon the educated laymen may be seen in the description of the plague which devastated Athens from 430 to 426 B.C. as it is given by the historian Thucydides (II 47-58). He begins with an account of the approach of the disease, from Egypt via Syria to Athens. He then states his purpose in describing the course of the sickness. This was to enable people to know about it in case it should again occur; and he gives, as the basis of his exact knowledge, the fact that he had contracted it and had observed the cases of many others who had had it. The medical description of the disease is accurate and detailed. Even more significant is his report of the effect of this disaster, which the medical practise of the time was powerless to combat, upon the mass psychology of the Athenians. "No one was eager to endure sacrifice to gain that thing called good repute, because it was uncertain that one would live to attain it. Whatever was pleasurable for the moment, whatever contributed to this end of pleasure, was accepted as noble and useful. Neither fear of the gods nor laws of men served to exercise restraint, because it was assumed to be a matter of indifference whether one respected them or not, since all men alike were subject to destruction" (Thuc. II 53).

The outstanding figure in early Greek medicine, and one of the great figures in the entire history of medicine, was Hippocrates of Cos, whose best years fell about 400 to 375 B.C. Historical criticism has not been able to take from him the honor of authorship of the Hippocratic oath (*Hippocratic Corpus* IV 628-33 L) which has fixed the ethical standards of the profession since his day. Under the methods of Hippocrates cases were carefully recorded and described. Nowhere is the struggle against the prevalence of superstitious formulae in medicine more clearly stated than in a pamphlet, *On the Sacred Disease*, found among the writings of Hippocrates, but probably from the hand of a clear-headed contemporary. He combatted a tendency among the conventional physicians to refuse to handle epilepsy cases as being of divine origin and beyond the healing power of human skill. Like all other sicknesses, he contended, this also had a natural cause and explanation. Men ascribe anything they do not understand to the gods. If epilepsy is a sacred sickness, so also are the recurrent fevers and sleep walking, since the practitioner is equally unable

to explain them. The author's contention was that all natural phenomena must be approached in the same way. His scorn of superstition mongers, miracle workers, purifiers and other medical impostors was vigorously expressed. Possibly by the same writer is a pamphlet (also handed down among the works of Hippocrates), *On Airs, Waters, Places*, which is characterized by unusual powers of observation and breadth of learning. From personal observations made in a wide range of travels the author of this pamphlet constructed a theory of the effects of climate and soils upon the pigmentation, physical size and spiritual characteristics of men in different regions. He was convinced that acquired physical characteristics were heritable. He believed in environmental influences—that the superiority of the European dweller over the Asiatic was due to the greater harshness of climate in Europe and the greater variability of heat and cold, rain and sunshine. Political factors also, he said, play a part in this result. Wherever monarchy exists there necessarily is slavery. For the souls of people are enslaved under monarchic rule, and they are unwilling to incur danger for the sake of another's power. But the self-ruling peoples, who fight in their own interests, are willing to undergo dangers. He further observed that in Asia wherever men, either Greeks or non-Greeks, are not under autocratic rule but are self-ruling, they are more warlike than their neighbors.

In the medical *technē*, as in other trades, the apprentice system continued to supply the need for specialized and exact knowledge. Here the old Greek family grouping and solidarity continued to display its social usefulness. The father of Hippocrates was a member of the Asclepiad priesthood at Cos. The sons of Hippocrates and his son-in-law followed the profession. Tradition reports that his grandsons and great-grandsons were also physicians of the Coan school. In the fourth century there is a noteworthy movement toward separation of the craft of healing from its traditional connection with the medical experience of the temples of the healing gods and the practise of their priests. Thousands of archaeological finds of dedicatory offerings to the healing powers of the gods made by grateful patients attest, nevertheless, the continuation throughout antiquity of non-rational medical treatment, chiefly by magical cures through healing sleep in the temples of the gods. The important elements in

the history of Greek medicine are the differentiation made between temple treatment and a rationalized medical practise, the development of a craft knowledge and ethical standards by individuals, and the continuation of both knowledge and standards through private instruction by master physicians at definite places.

In the last quarter of the fifth century a group of individuals appeared as traveling teachers of the higher branches of knowledge to all who might have the interest and the money required in payment for their instruction. These were the sophists, professors of knowledge, as opposed to *philosophoi*, which means, literally, "lovers of knowledge." Three circumstances explain their appearance: the lack of public instruction; the greater demands imposed by the growing refinement of technique in all lines; and the public desire to share in the results of the intellectual awakening which was represented in the discussions of the natural philosophers. The prominent earlier sophists were Gorgias of Sicilian Leontini, Protagoras of Abdera in Thrace, Prodicus of the Aegean island Ceos, and Hippias of Elis in the Peloponnesus. Professing the ability to give a complete education in all branches of learning, their aim was to prepare men for practical life, particularly for successful activity in the political life of the time. The growth of democracy, the lack of any provision for a public prosecutor in the legal systems of the time and the want of a recognized legal profession demanded of the individual a knowledge of composition, of argumentation and of methodical and convincing presentation of facts. In meeting these demands the sophists founded the study of dialectics. In the study of language, particularly in its analysis, in the isolation of the parts of speech, and in the rejection of the speculative thought of the physical philosophers, the sophists deserve consideration as a group who furthered the development of the Greek sciences.

The sophists denied the possibility of absolute knowledge. Man is the measure of all things, of the existence of being or the non-existence of non-being. This enunciation of the subjectivity of all cognition was made by Protagoras. Good and evil, as the sophists in general taught, are purely relative ideas; and Protagoras stated that one might set up two propositions exactly opposed and defend each with equal justification. The sophists held that as it could not be known whether or not there

were gods, the "divine" laws in which Pindar, Aeschylus and Sophocles believed had no validity. Critias of Athens asserted that the gods were nothing more than a creation of some clever politician to restrain men from crime. The laws of states, likewise, were mere devices of social utility. Out of this assertion the more radical followers of sophism drew the conclusion that the right of the strong to rule and exploit the weak was a law of nature. Protagoras, however, found a rational ethical basis for individuals and states in the necessities of human association. He asserted (in Plato's dialogue *Protagoras*) that, without a portion of justice and a sense of shame in every man, human society could not hold together. In 443 B.C. Pericles assigned to Protagoras the task of working out the constitution for the colony of Thurii in southern Italy, then to be established. From this circumstance it is clear that the sophists were accredited in their time with something more than the mere academic knowledge of political science necessary for lecture purposes.

The intellectual significance of Socrates lies in the fact that he gave a new impulse to Greek thought out of the impasse into which it had been led by the sophistic teaching of the subjectivity of all human judgments. Socrates was convinced that truth is attainable. The judgments of individuals differ greatly as to the concept of "good," of "bad," of "beautiful," of "ugly." These differences have arisen from lack of clarity in thinking. By methodical analysis through discussion, by isolation of the essential elements of each concept, by agreement upon these essentials, the underlying truth of each judgment might be attained. Concepts thus attained Socrates held to be valid, and eternally so. Knowledge, therefore, could be both learned and taught. Through the definition of the "good" as that which is good for the person (advantageous in the best sense), Socrates came to the conclusion that goodness is the same thing as correct knowledge. The task of leading his fellow citizens along the pathway of correct thinking, particularly in its application to political activity, Socrates conceived as a mission imposed upon him by an irresistible inner impulse. He stood upon the same ground as the sophists in regarding the studies of the physical philosophers as useless, in his belief that the human being should be the sole object of investigation, and in the practical aim of educating the citizens of the state for political

life. He differed from the sophists completely in the method by which he attempted to reach this end, through discussion rather than by *ex cathedra* pronouncement of opinions. The "Socratic method" was of considerable importance, therefore, in furthering the development of thought. Socrates wrote nothing. He developed no philosophic system. It is through his pupils that he became the founder of Greek philosophy in its broader sense, as a metaphysical system freed from the limitation to cosmological questions which had characterized the earlier Ionian philosophy. Through his attempt to educate his fellow Athenians toward true thinking, therefore toward virtue and efficient citizenship, he injected the problem of ethics into political theory and thus into philosophy.

In the Iranian dualistic religious teaching the powers of good and evil strive in the physical world for mastery; and this strife is waged also in the heart of man. From Iranian Zoroastrianism this doctrine was taken over into Christianity and so dominates modern popular moralism. To approach the social conduct of the ancient Greeks with this preconception would lead not to a correct understanding of their attitude, but rather to a blind condemnation of practises which Greek society did not condemn and which Greek law, in many instances, publicly recognized. The entire problem of sexual purity, for example, which dominates Christian morality, fell away from their ken. "Purity of heart," in its sexual application, had no meaning to them. They never recognized thought in itself as evil. In precept and practise, beginning with the traditional doctrines of the semi-historical Seven Wise Men of the seventh and sixth centuries, the ideals were temperance, self-control, balance, the *mēden agan* (nothing in excess) inscribed on one of the temples at Delphi. In the actual Greek life of Plato's day sexual relations outside of the institution of marriage were permitted and expected. Marriage, according to Demosthenes, is an institution for producing legitimate children. Concubinage was expected, the offspring of concubines legally acknowledged and legally protected in their freedom if the mother were free. In Greek society of the fifth and fourth centuries homosexuality was frankly recognized.

Equally alien to modern Christianized morality is the Greek practise of infant exposure. In Sparta the right of the ephors to determine whether a child should be permitted to live or

should be exposed, was a usurpation on the part of the state of the primitive family right of the father. At Athens, as in other Greek city-states, the old right of life and death held by the head of the family was maintained with respect to the newborn infant until diminishing population, combined with the Christian ideal of the sanctity of human life, did away with the custom of exposure.

Accepting the method of Socrates and his belief that absolute judgments were possible, his pupil Plato, fundamentally a visionary and a great artist, attempted an adjustment of the difficulty which seemed inherent in the Socratic theory of cognition because of the illusory nature of sense perceptions. By a transcendentalizing process and with captivating imagery he established a world of super-concepts, superimposed upon this world of concepts. To him the realm of super-concepts was the realm of actualities (*ideai*, "forms"). The material world contained mere quasi-truths, reflections of the everlasting realities, impaired and distorted by the bodily senses. By adding the Pythagorean doctrine of pre-existence he could assume that those who had in higher degree the finer qualities of soul retained a dim memory of the actualities which they had seen in a pre-existent state. By intuition, by contemplation of these actual things, rather than by processes of reasoning, they might reawaken the memory of the *ideai*. Only such persons, true philosophers who had attained to self-knowledge, were truly competent to rule. In one of the letters ascribed to Plato (*Ep.* VII 326 a-b) a passage occurs which explains the political orientation of his philosophy. By the conditions of his birth and material welfare, an active political career in the Athenian state would have seemed the natural outlet for Plato's energies. At first he had been eager to take up active political life, but he soon perceived that all the city-states were badly governed and that the voting of good laws, under the prevailing conditions, was a matter of chance. He was driven to the conclusion that justice for the state and for individuals depended upon the study of philosophy. Human ills would not cease, he thought, until either philosophers who were trained to think straight and truly should come to hold the magistracies, or until the magistrates should become true philosophers by the interposition of some divine agency.

Out of this belief in the possibility of applying philosophy to the government of society Greek

philosophy assumed its complete form under the shaping hands of Plato and his pupil Aristotle of Stagira. The Academy founded by Plato in the belief that through philosophic study true statesmen might be trained, accomplished little, however, toward this end. The importance of the Academy and of the Lyceum later established at Athens by Aristotle is to be gauged by their history as organized centers of intellectual life in antiquity. In this respect their influence endured for a thousand years until, by order of the Emperor Justinian in 529 A.D., the philosophic schools at Athens were permanently closed.

Political thought was, from the outset, a fundamental part of Greek philosophy. Socrates had laid the foundation for the development of ethics. In his discussion of the problem of the good citizen he had introduced the idea of man as an ethical being. Plato's contribution to this branch of philosophy was the application of the criterion of ethical value to the social group, the placing of the good citizen in a state organization the aim of which was justice. Ethics thereby received its orientation in the general field of philosophy as a branch of political science; and political theory, which received both a keener analysis and a sharper and more scientific definition through Aristotle, acquired its characteristic ancient stamp as a systematization of social ethics. The practise of politics has constantly and widely deviated from this original philosophic standard. But in its theoretical treatment, whether the state be regarded as the end and embodiment of social morality or merely as a means of attaining certain practical objects such as public security, public order and general material welfare, political science has never departed completely from the Platonic conception of it as political philosophy.

Fundamentally Aristotle had a scientific mind. His tremendous powers were best displayed in his classification of the fields of knowledge embraced within the comprehensive designation of philosophy, in the establishment of scientific terminology, in the analysis of methods of approach, in the collection and arrangement of empirical facts, and in the hypotheses which he established on the basis of observed phenomena. In his metaphysics he remained under the influence of Plato's teaching of the "true forms." But it is characteristic of his mind that he sought these "realities" not in a supernatural, transcendental world with no bridge existing between it and the material world, as Plato had

done. These "realities" existed, for him, in the world of matter, immanent in the things of the sensory world. Equally characteristic is his treatment of the state (in his *Politics*). He starts with the proposition that man is inherently a social animal. Happiness can be obtained only by ethical activities of the soul; and the realization of a good life, and therefore of human happiness, is possible only in the setting of the state. The state form practically adapted to this realization is the city-state of the Greeks. In his *Politics* it is not the purpose of the realist Aristotle to describe a utopia but to formulate out of his knowledge of existing states a workable institution which will permit the practise of the "good life." Characteristic of his method is the fact that he had studied one hundred and fifty-eight separate state forms of the world of his day. He had described them in pamphlets, of which only one, *The Athenian Constitution*, has been preserved for us, found in the dry soil of Egypt and first published in 1891. The portion of his *Politics* which won for Aristotle the title of founder of political science is his division of the existing types of city-states into monarchy, aristocracy and polity, with their corresponding perversions—tyranny, oligarchy and democracy. This classification has been criticized as being based upon a purely quantitative principle applied to the ruling power. The criticism is valid from the standpoint of the inadequacy of the classification for present-day uses. If, as is more legitimate, Aristotle be regarded in the light of his own time, the criticism is found to be based upon the misapprehension that he was dealing with all the political forms extant in his day. He restricted his discussion, in fact, to the city-state form, neglecting the great territorial monarchies and the federations of his time. His division of the departments of government on the basis of function (*Politics* VI 14) into the deliberative, executive and judicial bodies, still retains its validity.

Social morality, as taught by both Plato and Aristotle, still betrays a fundamental tribal attitude in that the morality of the state does not transcend the relations of the individual citizen and his own state. In external politics Plato (*Republic* 469-474) warns the Greeks that only the barbarians are to be considered as natural enemies. Wars between Greek states are to be regarded as fraternal struggles in which extermination, wasting of the countryside, enslavement of a city and its inhabitants, are

not permissible. But this is a mere concession to the idea of the cultural unity of the Greeks so much discussed in his time. Aristotle declared that without military power and the exercise of this power against outsiders the state could not maintain its sovereignty. The struggle of one Greek state for hegemony over other Greeks was justified in his eyes if the rule thus established was made advantageous to the subjected Greeks. The conquest of non-Greeks was a natural right falling to the Greeks because the barbarians were their inferiors and thus by nature destined for enslavement to them. The philosophers' theory of political ethics contained no discussion of right and justice as between Greeks and non-Greeks, or even, in the fundamental sense of international law, as between Greek city-states. A theory of international ethics had not yet arisen.

Significantly the word "history" comes from the Greek word *historein*, "to learn by inquiry," used by Herodotus. A curiosity of mind in respect to the peculiarities of peoples and places is noticeable in the few remaining fragments of the early Greek chroniclers of historical events, Hellanicus of Lesbos and Hecataeus of Miletus. This trait distinguished the early Greek annals from the lifelessness of the records kept by the pre-Greek peoples of antiquity. Hecataeus had applied the criterion of personal criticism to the tales of the past which had come down to him, but he was still "a writer of tales" (*logographos*). Historical research and methodical skill in its presentation—the conscious method and discipline as well as the art of history—are creations of two Greeks of the fifth century B.C., Herodotus of Halicarnassus, and Thucydides of Athens. Herodotus in his account of the Persian wars is not without marked subjective tendencies, one being to glorify Athens, a second to defend the oracle at Delphi against the accusation of having prepared a favorable position for itself in case of a Persian victory. Herodotus was unable to discern the political, economic and social forces which determine historical events. As in the Greek tragedies of his time, the will of the gods dictates the outcome of human events. With ruthless envy the gods strike down those whose overweening greatness has irritated them, as with their lightning bolts they strike the tallest trees. This is the explanation which Herodotus had to offer of the unexpected defeat of the Persian by the Greek forces. He had traveled widely in his earlier years, collecting materials on the

characteristic social customs of different peoples, in the manner of Hecataeus, and on their past history, in the manner of another Milesian *logographos*, Dionysius. He was the first writer who conceived the idea of investigating a great historical problem and of presenting his results as historical literature. He was fortunate in the fact that the problem—the series of wars conducted against the Greeks by the Persian kings Darius and Xerxes—happened to be a crucial one in the historical life of the Greeks. This combination of circumstances, aided by his honesty of intent and peculiar charm in narration, have given him the title of the “father of history.” His earlier ethnographical studies as *logographos* have been patched into the body of his narrative as they seemed to be applicable. His purpose, as stated in his brief preface, was to save from oblivion the great and wondrous deeds of both Greeks and barbarians, and in particular to present the reasons for the war (historical causes). The causes which he presents are trivial; and he gives three conflicting reports, the Phoenician, the Persian and the Greek, without drawing a conclusion based on personal critical analysis. Nevertheless, by dealing even naïvely with causes, he isolated and consciously stated one of the essential elements in the investigation of historical sequences.

Thucydides wrote on contemporary events, and in particular on the Peloponnesian War, in which he was himself at first a participant. After his banishment from Athens in 424 B.C. he remained a keen and indefatigable observer of the course of the war. He was the first writer of historical events who analyzed critically the sources of his information and passed judgment on their validity. He realized the untrustworthiness of oral tradition, of the statements of eye witnesses, of his own memory and consequently of the memories of others (Thuc. I 22). Where Thucydides used official documents which have come down to us inscribed upon stone, he stands the test of general accuracy with credit. He distinguished the alleged reasons for the war from its fundamental or “truest” cause. This he considered to be the increasing power of the Athenians and the fear which it inspired in the Lacedaemonians. He was conscious of economic forces in history (Thuc. I 23). The gods, the oracles, all supernatural paraphernalia, are eliminated, except as the belief in these may produce a demonstrable effect upon the course of events through the psychological reactions of indi-

viduals or groups. He eliminated from his narrative everything of a purely episodic character which seemed to him to be unimportant, consciously sacrificing historiographic interest to historical importance. His careful methods in deduction from data which he had tested and accepted as trustworthy may still be profitably studied by historians. He was the first critical historian and one of the best.

In the business life of the Greek-speaking world the use of coined money as against barter economy had gone forward in the fifth and fourth centuries with amazing rapidity. The government of the great Persian Empire, covering southwestern Asia and Egypt, also coined money. But in the persistence of exchange in kind, in the custom of treasuring its surpluses of revenue in hoards of gold and silver, in the continuance of state monopolies inherited from the past, in the state ownership of great stretches of the arable land held as royal domain and worked by semi-serfs, the Persian Empire was unmodern in comparison with the Greek city-state world. In both agricultural and industrial production many survivals of the old royal and temple household (*oikos*) system remained, sanctified by centuries of custom. In Greece production and transportation were largely in the hands of private individuals, with little regimentation by the city-states as against their subjects. Private ownership of real estate and agricultural land was the rule in the urban industrial communities, although this general condition did not prevail in other places such as the socialized military state of Sparta, or in non-industrial communities like Thessaly and Macedon. In backward communities and on the periphery of the Greek world, in the more distant colonies of the Black Sea, for example, the functions of production, transportation and merchandising were, no doubt, often combined in one person. Of the industrial cities Athens was among the most important, as it is also the one best known to modern investigation. The Athenian situation may be regarded as representative of that of other large cities and of many smaller ones. In these communities investment opportunities for surpluses of capital accumulated in individual hands were chiefly farm lands (for olive and vine growing in Attica), handicraft industries, slaves trained to some trade and rented out to entrepreneurs, or loans made to professional merchants and owners of ships to finance their commercial enterprises. Since the city-state laws forbade

metics to own real estate, the accumulations of those metics who had been able to acquire any wealth were largely invested in small industries. The less fortunate earned their livings as skilled workmen or as petty tradesmen or engaged in transportation backed by loans for the merchandise which they carried. At Athens the overseas transportation was largely in their hands.

The importance of wealth as reckoned in terms of money and its interest-bearing capacity increased greatly in the Greek world of the fourth century. The money changer had necessarily been a prominent figure in all Greek markets because each of the multitude of city-states maintained its own mint and held jealously to its own coinage system as an important element of its independence. The extension of money-changing houses into banks occurred at Athens. It was largely due to a metic named Pasion and the successor to his business, a freedman named Phormion. Pasion established a deposit bank in which he received money and valuables from customers, paying interest on certain types of deposits. The accumulations he lent at interest. An important element in the financial transactions of this bank, and of others which rapidly arose in competition, lay in the technique of its bookkeeping by which payments of one customer to another could be made by transfer, on personal order, from the one account to the second. This was quickly extended to payments between customers of two different banks. Pasion made loans on valuable articles deposited in his storeroom, in the manner of a pawnbroker; and he was also a manufacturer on his own account and owner of his own shipping facilities. In the generation which followed him, however, banking became a more specialized department of business life.

Naturally there was considerable public suspicion of these early bankers, augmented by several disastrous endeavors in this new field of enterprise. This feeling is attested by the speeches of lawyers in suits entered against the bankers. Nevertheless the development of banking progressed rapidly. Either in the form of a state monopoly of banking enterprises, as in Hellenistic Egypt, or in private hands, as under the Roman Empire, deposit banks became an important feature of the economic life of antiquity. The social effects of the new opportunities thus afforded for safe reinvestment of accumulated surpluses cannot be traced with accuracy. It is safe to assume that the growing

differentiation of propertied classes and the poor was affected by it, and that the new regard for money as working capital influenced the old willingness of the citizen classes to assume semi-voluntary tax burdens such as liturgies for the navy and for the public gymnasia. The philosophic-political theorists of the fourth century were entirely opposed to the new economic order. They had found it possible, though with important changes, to adapt the political form of the existing city-state to their hopes. Their opposition to the current economic order was more complete, their suggestions of change were much more sweeping.

In the legislation of Solon (594 B.C.) citizen obligations and privileges at Athens were still based upon a classification expressed in terms of income in kind (500 bushelmen, etc.). At the opening of the Peloponnesian War in 431 B.C. the adjustment to the new complexities of business, both private and public, had been successfully made. Records of the Athenian state are available from 454 B.C. onward which show that a practical system of state accounting had been established, based upon tribute and taxation paid in coined money. Pericles, as head of the administrative and military board of the ten *strategi* (generals) at Athens, had reorganized and simplified the treasury system, reducing the number of the treasury chests and concentrating responsibility for payments and records (decree of 434 B.C. published in Hicks and Hill, *Greek Historical Inscriptions*, no. 49). Discussions of economic problems began to appear thereafter which display a new understanding of the importance of economics, especially of state and private finance. Among these are the *Oeconomicus* of Xenophon and the pamphlet *On Ways and Means*—a suggested scheme for increasing the revenues of the state—which appears among his writings. Isocrates, an Athenian teacher of composition and rhetoric of the fourth century, in urging the Greeks to cease their city-state wars and combine for an aggressive war against Persia, was definite in his insistence that some of the economic and social ills then prevailing in the Greek world could be cured by the conquest and exploitation of the western part of the Persian Empire. The new knowledge of the importance of business expressed itself in the appearance of the word *oikonomia*, which means, literally, "household management." Despite their understanding of business relations in social life, the Greeks did not establish economics as a separate discipline.

In their treatment it remained consistently a branch of the study of political science, which again was not abstracted from the general field of philosophy. This orientation within a metaphysical system explains why the economic theories of Plato and Aristotle are so completely colored by the ethical aims imposed by them upon the state as the embodiment of justice.

Both in the political practise of the city-states and in the political theory of the philosophers the purpose of the polity was to look after the material and moral welfare of its citizen group, but of this group exclusively. Protection of the rights of the classes of metics and slaves was subordinated to the advantages of the citizen body. One effect of this differential treatment appears in the early custom of distributing the financial surpluses of the state to citizens only. A later and more practical application of the idea was made by Pericles when he introduced payment for citizen service in the *boulē* and on the juries. This policy finds its rational justification in the democratizing tendency of the Periclean party, which aimed to equalize citizen participation in state affairs among all representatives of the citizen body, whether rich or poor. The introduction by Pericles of payment, to citizens only, of the fee required for admission to dramatic performances, exemplifies more clearly the old attitude of the privileges of the tribal group.

The economic knowledge of the philosophers of the fourth century, as represented by Plato and Aristotle, included the definition of wealth as value in use or in exchange, and an understanding of the difference between material wealth in money or goods and immaterial wealth represented by trained ability in some craft. Plato is definite as to the advantages of division of labor in the handicrafts and is insistent on technical specialization in the financial aspects of business. In his reaction against the social values of the new commercialism he attempted to eliminate both wealth and poverty because of their disastrous effects upon the ethical well-being of the citizen classes. He could not do away with mobile capital entirely, but would permit its accumulation only to an amount four times the value of the land allotment to each citizen. He would not permit citizens to engage in commerce or handicrafts. He would permit them to engage in agriculture but not as a means of gain beyond a livelihood. Surpluses of agricultural production were to be at the disposal of the state. Prohibition of the

use of gold and silver money by private individuals, of loaning at interest and of business on credit—these demands were designed to strike at the roots of the capitalism of his time. Economically the *Republic* and, in somewhat less degree, the *Laws* of Plato represent the attempt of a disillusioned mind to escape the evils of his own time by reverting to obsolete conditions of a past which could, in fact, no longer be revived.

In the political theory of Plato and Aristotle an attitude of contempt toward handicrafts and trade was established which dominated philosophic discussion, in its economic aspects, for three hundred years. Agricultural work alone was regarded as worthy of a citizen, the practise of the trades being relegated to non-citizen classes. This theoretical attitude toward industrial labor has often been accepted as representing a social feeling widespread among the general public of antiquity. Such was not the case. Where he was not under the compulsion of his general scheme Plato himself in his dialogues shows a high regard for good craftsmen as exemplifying purposeful devotion to the task in hand and a knowledge of the methods of reaching their ends which should be equally applied in statcraft. This more rational attitude toward labor goes back, no doubt, to Socrates who was himself a trained stonemason.

The political and social classification of citizen and non-citizen members of the perfected state in Plato's *Republic* and *Laws* is a free adjustment of actually existing institutions, especially those of the backward state of Sparta, to prevailing conditions of Greek life and to the necessities imposed by the larger metaphysical-ethical scheme in which this perfected state was set. Acceptance of the prevailing assumption of differences in the innate capacities of men seemed to give to the classifications of the theorists a rational and scientific justification (*Republic* II 370). The soul, says Plato, has three distinct faculties, those of reflection, of courage and of desire, or appetite. In accordance with the dominance of one or another of these parts of the soul, the citizens are to be divided respectively into three classes, the philosopher rulers, the warriors and the producers. The normal condition of warfare among the Greek city-states is accepted as a constant; and the task of the class of warriors is to provide for the defense of the state. The communistic feature of state support for the two upper classes and their separation from all connection with

productive enterprise is an adaptation of Spartan conditions. The elimination of the class of producers from any connection with the political or military functions, their reduction practically to a state of helotage, is Spartan. So also is the requirement of state control of the rearing and education of citizen children.

III. THE HELLENISTIC PERIOD. Outside the circle of the Socratic followers many other thinking men had lost the belief in popular rule by the citizen group which had motivated the internal politics of Pericles. By the historical student it may be questioned, as well, whether the entire system of the particularistic city-states had not proved itself unsuited to meet the changed needs of the Greek world. From the beginning of the Peloponnesian War to the battle of Chaeronea in 338 B.C. the tendency toward unity in larger groupings and the old ideal of the self-sufficient city-state had been pitted against each other in constant and destructive warfare. Hegemonies, established by *force majeure*, succeeded one another rapidly and passed away without justifying themselves by any new political idea capable of replacing the city-state separatism. One practical and promising effort toward solution was, however, attempted in the fourth century. This lay in the formation of localized federations of city-states in various parts of Greece, among them the Chalcidic and Boeotian Leagues. These combined complete autonomy and freedom from interference in local administration and legislation with the possibility of unified action over larger areas. It is a tribute to the political realism of the Greeks that they worked out in these leagues the practise of representation in the federal legislative body and in federal administration on a basis roughly proportional to the population and the tax paying and military strength of each unit. It is a singular fact that neither Plato nor Aristotle mentions the idea of the federations of city-states which had sprung up about them. Just as they failed to envisage the possibility of the life of happiness and moral elevation, the "good life," amid the new economic realities of the actual world of their time, so also they clung to the outward form of the city-state, though vitally changing its inner content. This inability to conceive the state except in the form of the small *polis* may be explained by their purpose, which was to place the individual as an ethical being, the state form being merely the organism in which

the individual must meet these problems, and therefore only a necessary side issue to the major problems. The city-state was the form within which Greek civilization had developed, and in their minds, perhaps, the only organization suited to the temperament of the Greeks with whom they were concerned. These suggestions may offer a satisfactory explanation of the fact that Plato and Aristotle did not deal with the possibilities which lay in the city-state leagues of the time.

When he had the Greek peninsula securely in his power (338 B.C.), Philip II of Macedon paid his tribute to the reality and power of the city-state as a Greek ideal and to the possibilities inherent in a federal organization of city-states by uniting all of the Greek states except Sparta in a comprehensive League of the Hellenes. There is little doubt—and this applies equally to Alexander at the outset of his career—that he intended to make the League of the Hellenes of essential service in the world which might be created as a result of their activities against Persia. Alexander's conquest of the Persian Empire resulted, after his death, in bringing under the sway of dynasties of Macedonian nobles a great territory with old and well established cultures. Their peoples had long been accustomed to the government of autocratic monarchies. Alexander had wisely adopted autocracy as the necessary basis of his rule over his Asiatic and Egyptian subjects. In this he was followed by his Macedonian successors, the Seleucids in Asia and the Ptolemies in Egypt. In Macedon, however, the monarchic power was never able to discard the limitations upon it which were traditional to the country.

Although in the new conditions of the Hellenistic age the city-states declined in political importance, their cultural significance still persisted. We know that Alexander requested his former tutor Aristotle to write two treatises for him, both lost to us, one on *Monarchy*, the other on *Colonization*. These were the two principles which he used in his great plans for the world he had conquered—monarchy as the form which Greek rule was to take in the newly conquered world, and colonization of Greeks and Macedonians as the means of maintaining that power and disseminating Greek culture within its bounds. It is a splendid tribute to the city-states of the Greeks, and to Alexander's understanding of their value, that he organized his colonies from the outset in the city-state form; each with its Macedonian-Greek citizen

body, its elected officials and its electoral-legislative assembly. It was a recognition of the fact that the Greek culture which had been created in the city-state could only live and work effectively in the atmosphere which had produced it. The independence of these new city-state creations was one of mere local autonomy and freedom from the oversight of provincial governors; but as a concession to the cultural value of the city-state and to the intensity of the Greek feeling for it, its use by Alexander is significant. In this policy of colonization by city-states Alexander was necessarily followed by his Seleucid successors in Asia. Their territory included Asia Minor, in which free Greek cities had long been established and the demand for independence remained alive. The numerous cities which the Seleucids founded in Syria naturally were in close contact with these older Greek cities. The Seleucid foundations, in consequence of this proximity, developed and maintained a considerable amount of independence as against the Seleucid state in the second century B.C., when the kingdom of Syria was breaking down under the pressure of Roman advance from the west and Parthian attack from the east.

In Egypt the situation was entirely different. Outside the old free city of Naucratis at the mouth of the Nile, Greek polities were unknown. Alexander had founded the one Greek city of Alexandria, giving it the customary government of a city-state. It became the residence city of Ptolemy I. As the royal residence of an absolutistic monarchy of the old Pharaonic type its city-state freedom was from the outset a mere shadow. Only one other free Greek polity was founded by Ptolemy I, at Ptolemais in Upper Egypt. Macedonian and Greek settlers came into Egypt in swarms, attracted by the wealth of the country and by the amazing opportunities for advancement which the bureaucratic and military service of the Ptolemaic state offered them. The Greeks recruited for the Ptolemaic armies throughout the countryside were settled as holders of land allotments. Though many of the Greek immigrants lived in cities and towns and established therein Greek temples and the customary externals of a Greek cultural life, these cities and towns did not become self-ruling Greek polities. In those territories, however, which the Ptolemies held outside of Egypt, they were compelled to compete with the Seleucids, and their colonization took the customary form of the "free" city-state. Al-

though the city-states of the Hellenistic period retained the organs of the democratic *polis* and continued to pass laws and resolutions, it is obvious that their actual dependence upon the great autocratic monarchies left them only a limited range of independent action. They serve, however, as a recognition, by Alexander and his followers, of the cultural value of the Greek *polis* and of their belief that the life which the city-state had created could be best perpetuated through its agency.

It is clear that the old Greek type of *polis* patriotism must, in the new world conquest, give way to a wider conception. The result is seen in the rise of a supernationalism which the Greeks called cosmopolitanism (world citizenship). It corresponded to the new cultural situation which actually existed in that part of the world lying within the eastern coastline of Spain and the Indus River. One language, the Greek, in a standardized form called the *koinē*, would carry a man from its eastern to its western limits. This is seen in a recently found Greek papyrus of the second century after Christ, in which an Egyptian proclaims the praises of the Egyptian-Greek syncretized worship of Imhotep-Asclepius. He had translated into Greek the tale of his religious experience, explaining his reason by addressing the god thus: "Every Greek tongue will proclaim your story and every Greek man will worship Imouthes, son of Phtha." Other agencies likewise tended toward a certain standardization of external aspect in this Hellenized world, the Hellenic forms being the standardizing and universally accepted elements. The urban communities which were not Hellenic city-states were eager to obtain the outward signs of Hellenic culture. When Antiochus IV, the Seleucid king, was in Syria and Palestine, envoys from many communities came to him petitioning that the king set up a gymnasium, form a body of *ephebi* (semi-military clubs with a definite social standing) and register the inhabitants of these communities as Antiochenes, which meant that he was to establish their cities as autonomous city-states under the name of Antioch (*Maccabees* II. 4: 9). In 58 B.C. Julius Caesar found that the records of the Helvetians of Switzerland were written in Greek letters. The apostle Paul, preaching in Lystra, a town of southern Asia Minor, made his remarks in the *koinē* Greek which the local population understood. His hearers reverted, however, to their own Lycanian dialect when excited by a faith cure

performed by Paul. The tendency toward universalism expressed itself in the philosophies of the time, particularly in stoicism, and in the appearance of histories which dealt with the general world conditions at a given time rather than with a single country or people. The new historical outlook appears notably in the historians Polybius and Posidonius, and it is later marked in the work of the universal geographer Strabo.

It is true that Greek culture, in the period from Alexander's conquest to the establishment of the Roman Empire, attained a position of preeminence over the minds of cultured men in modes of thought and modes of expression such as no previous civilization had approached. This preeminence differentiates itself from that later won by Islam in that Greek culture penetrated all the Semitic and old oriental areas which Islam later conquered and in addition bridged successfully the ethnic and cultural divergences which separated the mental world of north Africa and southwestern Asia from that of Europe. This feat Moslemism could not accomplish. In the latter half of the third century B.C. a king of Ethiopia (modern Sudan) is reputed to have "had some tincture of Hellenic education" and to have studied philosophy (Diodorus III 6). In the process of their spread the Greeks and Macedonians themselves were in time gradually assimilated by intermarriage with the local populations. In Egypt they became Greco-Egyptians, in Syria, Greco-Syrians, in distant Bactria, Greco-Bactrians. The mother of Antiochus I, son of that Seleucus who founded the Macedonian dynasty which ruled in western Asia for two hundred and fifty years, was an Iranian princess of Bactria. Although the Jews on the whole resisted the intrusion of the modern Greek culture of the time with fanatic zeal and although intermarriage with Greeks must have been extremely rare among them, the question of the adoption or rejection of Hellenic life became the central political question in Palestine in the second century B.C. Under Antiochus IV of Syria (176-164 B.C.) two of the high priests of that time bore Greek names, Menelaus and Jason. Through the Greek papyri it is now possible to follow in Egypt the actual process of intermarriage between Greeks and native Egyptians. The net result is that after 150 B.C. the appearance of a Greek name in Egypt implied only that its bearer was of the upper and educated class. The Ptolemaic ruling family maintained

its blood untainted by Egyptian elements. Nevertheless the surrender of this dynasty to non-Greek standards is clearly shown in their adoption for political purposes of the old Pharaonic custom of brother-sister marriage. The custom in one authenticated instance was also followed by a Seleucid king. To the mind of the Greeks before Alexander's day this was incest, and as such abhorrent. It is significant of the local differences which continued to exist in the Hellenistic world that this practise was never adopted by the Macedonian kings and was never regarded with favor in Greece itself.

In the process of its spread over the ancient Near East and its acceptance by the preponderant body of natives living there, Greek culture necessarily suffered vital changes other than those exhibited in the substitution of universalism for local patriotism and the general acceptance of governmental absolutism in place of city-state freedom. Such changes might be the result of original Greek conceptions which were altered in the process of adaptation of the Greeks themselves to circumstances which were fundamentally different. They might result from the adoption by the Greeks of older ideas of the pre-Greek Orient. Or they might be the outcome of a combination and amalgamation of both Greek and oriental tendencies into a new belief or a new approach to the problems of life. The process and result of the transformation of Greek culture into Hellenistic culture is clearly seen in the changes in religious life and thought. New to the Greek world and significant of the process of derivation from both Greek and oriental points of view, is the rise of the Hellenistic king-god cult. Alexander the Great was the first Greek monarch to receive and to demand worship as a god. In 332 B.C. he entered Egypt, then a satrapy of the Persian Empire, but smoldering with the spirit of revolt. Alexander was hailed as a liberator. The country fell to him with no resistance. His most significant act was to take a journey of some twenty days to the temple of Ammon in the great western oasis of the Libyan desert. Upon his arrival there he was hailed by the priests of the temple as the son of Ammon, whose oracle had a prestige in the Greek world almost equal to that which it enjoyed among the Egyptians. To the Egyptians this act of the Ammon priesthood was a necessary and customary procedure in the legitimizing of their Pharaoh, by recognition of him as son of the sun god. Eight years

later Alexander sent out from Susa a demand to the Greek city-states that each city place him among their city gods. The origin of this demand, to which the Greek cities agreed, is purely Greek. The distance between gods and men had never been great in the anthropomorphic polytheism of the Greeks. To add one more god to the list of their divinities was not impossible or even difficult for them. The founders of colonies had customarily received the honor of cult worship after death. Sophocles, the dramatist, had in like manner been honored with a shrine and a cult worship. Isocrates had written to Philip of Macedon that if he should unite the Greeks and lead them in a national war against Persia he would indeed be a god. Aristotle had taught that a gifted ruler of incomparable virtue was like a deity on earth. Alexander's demand from the Greek states was therefore Greek. It implies nothing as to any personal conviction on Alexander's part of his own divinity. The explanation is now generally accepted by historians that the measure was political. It relieved him of the embarrassment caused by the independence of the Greek city-states, which Alexander had himself recognized in the League of the Hellenes and of which, as *hegemon* of the league, he was the defender. If recognized as a god in each of the city-states, he was thereby placed above the laws which its citizens might pass. The whole method and attitude toward this Greek divinity by decree of man differed from that which had created the divinity of the Pharaoh. The Greek ruler-god became such by virtue of an apotheosis. The Egyptian god-ruler was such by special investiture and by an act of divine grace.

Greek city-state polytheism had suffered by the attacks of Ionian physical philosophy in the sixth and fifth centuries. The followers of Socrates in the fourth century had assumed the function of ethical guidance of individuals for which the city-state religion provided no machinery. The *polis* had lost its importance as a political factor in the Greek world. With the decline of the city-state, the *polis* religions also lost the remainder of their spiritual hold upon the Greeks. The Macedonian Seleucids who ruled over western Asia, the Greek kings of Bactria, the Macedonian Ptolemies in Egypt, were monarchs in countries which had been accustomed to religious control, exercised by the state and guided by strongly established priestly classes. The tendency of the times, both by natural growth and by conscious effort

of the rulers, was toward the growth of syncretistic religious forms which might appeal both to the Greeks who colonized Egypt and western Asia, and to the natives, and give to the two ethnic elements a common ground of worship. In this process of amalgamation, identification or equation of a Greek god with an oriental god, it was the spirit of the oriental deity which dominated.

The best example of such a growth was the worship of Sarapis, which spread widely and far beyond the boundaries of Egypt where it originated. Out of a previous worship of the dead Apis bull as Osiris-Apis in the ancient city of Memphis, evolved the Greek divinity Sarapis as a god of the underworld. There is some reason to believe that this cult was a creation of Ptolemy I as a part of his religious-political policy. Certainly the cult was a matter of deep interest to the first two Ptolemies. Promising immortality, sometimes in the triad worship of Isis, Sarapis and Anubis as at Delos, sometimes alone, Sarapis attracted worshipers over the Greek world; and his cult was destined to endure for seven hundred years, until Christianity was strong enough to eradicate it.

With the conquest of Persia Iranian religious ideas began to penetrate westward. We now know that a sanctuary of the Persian god Mithras existed in a town in middle Egypt in the third century B.C. Although Greek cults were carried throughout western Asia along with the Greek colonists, the Greeks were more prone to accept the oriental worships than to impose their own. In 256 B.C. in Egypt the entire Greek retinue of the treasurer-general Apollonius, himself a Greek, ceased work at the time of the celebration of the purely Egyptian festival of Osiris-Isis. The final result of this process is to be seen in the first two centuries of the Roman Empire when the Egyptian Isis and the Persian Mithras worships were dominant religions in the Roman world. The methods by which they were spread can no longer be followed in detail; but suggestions of the organized propaganda which brought it about have appeared. A list has been found in Egypt, compiled apparently in the first century after Christ and kept in some Isis temple, in which the countries and cities are named where Isis cults then existed. The list includes India, Babylon, the Aegean islands and Italy.

Despite its formal continuance as expressed in temple building, festivals and sacred processions, the complete inadequacy of the Greek

city-state religions to satisfy the religious needs of the Hellenistic age is everywhere apparent. Nowhere is their complete lack of a spiritual content adequate to meet the new religious demands more clearly seen than in a book of Euhemerus of Messana, called *The Sacred Writ*, which appeared about 280 B.C. Euhemerus expressed his views on the rise of religions in a genetic-sociological study presented in the popular form which the utopias of the fourth century had taken. He asserted that he had been cast out upon an island located in the Arabian Sea, and had found there an inscription which recorded the names and deeds of the rulers of old who, by virtue of their activities for the welfare of mankind, had been deified and were now worshiped as gods. The origin of the gods was therefore explained in pragmatic-historical fashion as lying in the self-deification of mortal rulers or their apotheosis by a grateful posterity. The deification of the dead Alexander had obviously given a background of actuality for this theory. As proof of the Greek interest in sociological problems it may be noted that Euhemerus in his *Sacred Writ* found occasion to give a survey of the cultural development of mankind. In agreement with sophistical teaching he believed that mankind had slowly progressed through the civilizing activities of the oldest kings, of whom Zeus was the greatest, out of a primitive stage of unorganized living to the ethical and cultural conditions of the civilized life of his own day. *The Sacred Writ* of Euhemerus had little effect upon religious or philosophic thought in the third century B.C.; but in the second century it was widely read in Roman circles merely as a charming literary production attractive to the religious skepticism which was permeating the Hellenized circles of Rome.

Arising as a political expedient with a Greek background, divine worship of the living ruler found in Egypt a fertile soil for its further development. Ptolemy II Philadelphus was the first of the Hellenistic rulers after Alexander who dared to establish a cult of himself as a living god. In its Hellenistic practise the custom implied no belief in the divinity of the person worshiped, on the part of either the worshiper or the recipient of worship. It was an expression of loyalty to the ruler. In this form and with this meaning the Greek cities established cults to their Roman conquerors in the first century B.C. Among the Romans who thus received divine honors were Sulla, Lucullus and Cicero,

who was amused by it. Formulated by the founder of the empire and given a definite place in his new state organization, this practise of ruler worship, in the cult of *Roma et Augustus*, had far reaching effects in the Roman imperial period, particularly on the official relations of the Roman Empire with the Christian converts. The Christianized Roman Empire of the fourth century was forced to reject it; but in the weakened form of the political theory of the kingship by divine right it gave powerful support to the theory of monarchic sovereignty throughout the Middle Ages.

When the Greeks came into intimate contact with the many peoples of the old Persian Empire, the Greek conviction of the natural superiority of Hellene over non-Greek necessarily broke down. Inter-marriage with native women must have done much in this direction. Through such contacts, indefinitely multiplied, there came to the Greeks an appreciation of the long established civilizations of the peoples among whom they lived. Berossus, a Babylonian priest of Bel, dedicated to Antiochus I a history of Babylonia which he had written in Greek. Manetho, an Egyptian priest living under the first Ptolemy, opened to the Greeks the knowledge of Egyptian history, which he chronicled in the Greek language. By these means and, more subtly and firmly, through the thousand minor pressures of daily intercourse, the new age developed a broader conception of humanity than that contained in the old antithesis of "Hellene" and "barbarian." The passing of *polis* patriotism displays itself in many and divergent forms—in the willingness with which Greek mercenary troops changed after a losing battle into the service of the victor; in the confidence with which the new master hired them; in the stoic teaching of the basic brotherhood of all men, of whatever racial stock; in the non-local character of the scientific spirit of the time. Eratosthenes of Cyrene, eminent geographer and librarian at Alexandria in the last half of the third century, expressed these new relations in his statement that men were to be differentiated no longer as Hellenes and barbarians but according to their excellent or their bad qualities. The Aristotelian view of the inborn superiority of Hellene over non-Hellene had broken down for intellectuals like Eratosthenes. But the new classification, by criteria of intelligence and character, did not find a like acceptance among the masses of the people dominated by Macedonian dynasties and by

Hellenic culture. Native reactions against the rulers and their policies, which bear many resemblances to modern nationalism, shook Egypt as well as Palestine in the second century B.C.

The view that the differentiation between Hellene and barbarian was no longer valid was generally characteristic of the time. Its philosophic formulation is to be ascribed to stoicism. This school was founded at Athens in 301 B.C. by Zeno, whose native city was Citium in Cyprus. Despite his Greek name his place of birth implies that he was a Semite, probably a Phoenician. If this be true, the fact that a Semite could establish a school in Athens, the center of Greek philosophic studies, gives early evidence of the denationalizing of "Hellenic" culture after Alexander's conquests had brought Greek and "barbarian" together. The political theory of the early stoic school agreed with the Aristotelian in the belief that man was a social animal and that his activity must be directed to the betterment of the social group to which he belonged. But stoicism abandoned completely the city-state, springing from it to the concept of a world-state in which all men were fellow citizens. "We do not dwell in separate cities or demes, each group bounded off by its own rules of justice; but we consider that all men are fellow demesmen and fellow citizens, and that life is one and the universe one" (von Arnim, *Stoicorum veterum frag.* I no. 262). To Zeno the reformed *polis* of Plato was "laughable." With the few fragments of the *Polity* of Zeno which have come down to us it is scarcely possible to offer more than conjectures as to its relation to the actual Greco-Persian Empire. No doubt the reality of Alexander's great empire, brief as its unity was, had inspired the idea of a single state which would embrace in a comprehensive citizenship the entire world penetrated by Greek culture. Zeno could not have regarded it otherwise than as a utopia, unrealizable but corresponding to justice based upon reason (*logos*), and to the divine law of brotherhood implanted in the heart of every person. The stoic world-state, therefore, in its broadly conceived and idealistic formulation, cannot be treated as political theory. Both the continuance of the city-state and the exploitation of the subject peoples by their Macedonian monarchs weakened the conclusions which must logically have been drawn from the original stoic ideal of cosmopolitanism and brotherhood. These logical conclusions the stoic did not insist upon. Soon,

in fact, stoicism compromised its teachings with the monarchic principle, so that the stoic believer could accept political preferment, even under absolute monarchs, if by his service he could feel conscious that he, individually, was working toward ethical ends and the good of mankind. By virtue of this compromise of its principles stoicism became an active force in the politics of the Hellenistic world. Antigonos Gonates, who in 277 B.C. established the new dynasty of the Antigonids ruling Macedon, was a stoic by training under Menedemus of Eretria and by friendship and admiration for Zeno. He played the game of politics as the exigencies of his situation as ruler of Macedon required. On the whole his political methods and the conduct of his task reflect credit upon the religious-ethical system in which he believed and upon his spiritual adviser Persaeus the stoic. In his attempt in the latter half of the third century to revive the old communism of the Spartan state by cancellation of debts and nationalization and distribution of the land, Cleomenes of Sparta was advised by the stoic Sphaerus. It is in the first two centuries of the Roman Empire, however, that the spirit of stoicism attained its maximum of practical value. Having adopted the monarchic principle, with the constant hope that the monarch might be permeated by the spirit of devotion to his task as a social duty, it became a guiding force among the higher classes who ruled the Roman Empire. In the person of the Emperor Marcus Aurelius the stoic devotion to that duty which a chance position in life might impose, reached its highest expression.

In its statement of the equality of Greek and barbarian and of man and woman, stoicism echoed thoughts which harmonized with two social tendencies prevailing at the time of its origin and throughout the Hellenistic period. The logical consequences of the stoic doctrine of the equality of slave and free man were not realized in antiquity in attempts to discard slavery as an economic and social system. It had its influence, however, in the time of the Roman Empire in shaping the public attitude toward slavery; and it may have influenced imperial legislation which afforded greater protection for slaves and materially lessened the former harshness of the Roman treatment of them. As to the new position of women which stoicism reflected, it may be that this represented a general revival in the Greek world of

the older Homeric Greek social ideal which had survived in the more primitive life of Macedon. A close intellectual bond existed between Alexander and his imperious mother Olympias of Epirus. Traces remain of his constant correspondence with her; and after his death she obtained a position of political influence such as no woman had previously held in the Greek world. During the following three centuries the Macedonian dynasties of the Ptolemies in Egypt and the Seleucids in western Asia produced numerous women of striking ability. Their power in politics is expressed in the names given to many of the Greek city foundations. The Seleucid cities Apamea, Nicaea, Laodicea, and the Ptolemaic towns Berenice and Arsinoë, are named after women of the Macedonian dynastic families. Arsinoë, the sister of the second Ptolemy and his wife from 273 to 270 B.C., was deified after her death, and an official worship of the two as "the brother-sister gods" was founded throughout Egypt. The images of the Ptolemaic and Seleucid queens appear on the royal coinage beside those of their husbands. So also the head of Cleopatra, the last of the Ptolemies, appeared on her coinage beside that of her Roman husband Marcus Antonius. Even under Augustus Caesar the heads of the feminine members of the Roman imperial family began to appear on the coins from the mints of Rome. In this practise, which is distinctly non-Roman, the imitation of the Hellenistic coinage practise is symbolic of the adoption of a greater freedom of action by women during the Roman Empire and the acceptance of the Hellenistic attitude toward them by society at large. The change in the position of women in the Hellenistic age was not confined to the teaching of stoicism and the political influence of the ruling classes. Women appeared among the Hellenistic poets and painters. A young woman, for example, was numbered among the students of the founder of Epicureanism. The Hellenistic city-states, in taking over endowments for the education of freeborn children, included the education of girls, establishing "supervisors of women" who appear in a number of official city documents which have come down to us.

The greater freedom of women evidenced in Hellenistic social life is connected with the higher value which that age accorded, in general, to the individual. This may be seen in the stoic teaching of the maintenance of man's spiritual freedom and his superiority to pain and

degradation through his will. It is also seen in the teachings and actions of the wandering preachers of cynicism. With them the cult of freedom of individual action and of disregard for all social conventions sometimes went so far as to take the form of vulgar indecencies. In the Epicurean theory, corresponding to its completely materialistic view of the universe, the state was regarded merely as a useful invention, a thing established by chance, by force or by contract in the interests of public security. The criterion of personal happiness was therefore dominant in their teaching. This new emphasis upon the individual corresponded to actual conditions of the century which followed Alexander's death. The first fifty years were a time of meteoric careers characterized by the sudden emergence and disappearance of powerful single personalities. The worship of the Hellenistic kings as "gods manifest" was a characteristic of the new individualism. So also was the rise of biographical literature and the belief of Polybius, the outstanding historian of the second century B.C., that the great personality is the determining force in history.

It may be that the increase in consciousness of the worth of the individual, which is notable in the Hellenistic period, was a psychological compensation for the loss to the Greeks of their *polis* patriotism and of that feeling of importance which political activity in the old city-state had given them. There was room enough in the service of the great Hellenistic monarchs for the abilities of ambitious and able men in every line of work. There was a constant market for Macedonians and Greeks as mercenary soldiers in the many wars and in the standing armies of the Hellenistic rulers. Throughout the third century the higher offices in the tremendous bureaucratic service of the Ptolemies were completely filled by them. The pay was good and opportunity for self-advancement of the individual was great. But the old loyalty to the citizen group and the feeling of participation, as decisive and free agents, in the activities of the state, were gone. The compensatory theory may also help to explain another phenomenon markedly characteristic of the Hellenistic age. This is the appearance of a tremendous number of private associations and clubs which were entirely non-political, and professional only in the sense that those engaged in one *technē*, soldiers, artists or poets, tended to group together. They exemplified the cosmopolitan spirit of the time in that membership was not

confined to Greeks alone. A recent bit of information from the time of Augustus Caesar is highly characteristic, namely that a club for women existed in the Egyptian capital Alexandria.

The Hellenistic civilization of the three centuries preceding the founding of the Roman Empire must be approached as a composite of many types of local hybrid cultures: Greco-Egyptian, Greco-Asiatic (which must be subdivided into numerous forms such as Greco-Syrian, Greco-Bactrian, Greco-Asia Minor, etc.), Greco-Italian. The penetrating and dynamic agencies on the whole were Greek; but the degree of the Greek penetration necessarily varied in each country and between the urban and rural districts of each locality. In the urban centers, where the Greeks congregated in large numbers, the Hellenic externals of life, as represented by temples, gymnasia and the adoption of the Greek style of dress, were marked. In the rural districts even these external Greek manifestations would decrease in number and variety, probably to the vanishing point in the countryside which was far removed from the great lanes of travel. Official use of the Greek language in all of the Hellenistic kingdoms made a speaking and reading knowledge of Greek a necessity for every man of culture and of official position. It is clear that the amount of literacy was greater in the oriental states after they had been taken over by the Greeks than it had been previously. The upper and middle classes could read and write Greek. The lower classes made use of professional scribes for their letter writing and for the preparation of their contracts and petitions to be handed in to the government officials. The knowledge of writing in the old scripts, the Babylonian cuneiform and the hieroglyphic and demotic scripts in Egypt, was beginning to disappear after 200 B.C. In a fragmentary letter of the second century B.C. a mother writes to her son, both being "culture Greeks" and possibly Greeks by race, that she is glad to hear that he is learning the Egyptian letters and is to teach Greek to the children of an Egyptian physician and thereby earn his living. In the time of the Roman Empire the knowledge of the old Egyptian hieroglyphs was retained only by the priests of the old Pharaonic religion. There, too, it disappeared completely in the second century A.D. When the Egyptian language was taken up again and used as a literary form in the Christian propaganda in Egypt, the alpha-

betic symbols used for the writing of Coptic Egyptian were largely taken over from the Greek.

In the great Hellenistic monarchies of Egypt and Syria general education still remained a matter of private initiative, without state support. In the city-states of the Greek peninsula and of Asia Minor it became customary for wealthy men or the monarchs of the time to grant endowments for the education of the freeborn children of a city. In such cases the city governments necessarily took over the problem of investment and management of the fund, appointment of teachers, methods of testing or examination of the pupils, and the subjects to be taught; but the cities made no grants in aid out of the city taxation. The mental disciplines were the old ones—writing, reading and literature. To these were added harp and lyre playing and musical theory, with a rather disproportionate emphasis upon physical education as represented by semi-military exercises such as javelin throwing. The further training of young men in the Hellenistic period was under a system called the ephebate. In the late fourth century in Athens the sons of citizens in their nineteenth and twentieth years, called ephebi, had been given a probationary training for military service under the direction of state officials. The system was widely adopted by the free Greek cities and in the great monarchies of the Hellenistic period. We have no proof of state support for the ephebe system. For Ptolemaic Egypt one certain instance of its support through private endowment is known from a contemporaneous document. It centered about the gymnasia of the cities and seems to have retained some connection, along with the gymnasia themselves, with the right to qualify its members for military service. That it was open only to the class of "Hellenes," which no longer denoted Hellenic blood, is certainly established for Ptolemaic Egypt. Inclusion among the ephebi was a mark of social distinction. In Egypt the ex-ephebe was freed from the poll tax paid by all the Egyptian lower classes, and he was set apart as a member of a social aristocracy. The class cleavages of Hellenistic society were therefore no longer those of native-born and alien. The new classifications were economic and cultural—those of poverty and wealth, participation in Hellenic culture and the lack of it, or the standing which one might have attained in the service of the autocratic monarchies.

For the progress of Greek higher studies, particularly in the fields of Greek literature, linguistics, medicine and geography, the museum at Alexandria was an organization of outstanding importance. Founded by Ptolemy I and directly modeled in its organization upon the philosophic schools at Athens, it differed from them in being primarily a place of research rather than a school for instruction. Under support from the Egyptian state, scholars and literary men carried on their work there. The library established in connection with the museum was the first attempt that had been made on a large scale to assemble the complete output of Greek scientific and literary activity. The idea certainly came from the modest collections of rolls which had been made at the philosophic schools at Athens. About 240 B.C. 490,000 rolls were said to be in the Alexandrine library. How many volumes this would represent in the modern sense cannot be estimated, because we have no knowledge of the number of duplicates which were included. It is known that the first three Ptolemies went to great trouble to procure copies of all available books written in the Greek language. A library was established at Antioch by the Seleucids and one at Pergamum by the Attalid rulers of Asia Minor. The directors of the Alexandrine library in the third and early second centuries B.C. were distinguished literary or scientific figures in the world of the time. Zenodotus of Ephesus, the great Homeric critic, was the first librarian. The poet Callimachus of Cyrene was active in the cataloguing of the rolls. Toward the end of the third century B.C. Eratosthenes of Cyrene, an outstanding figure in the science of geography, was followed as librarian by Aristophanes of Byzantium, another Homeric scholar.

The importance of the Alexandrine museum and the libraries mentioned above as recognized and continuing centers of higher studies, with collections of materials available for the use of scholars, must have been great. Unfortunately we do not know what conditions were imposed upon the use of the books, nor can we prove to what extent they were used. Under the government monopoly, established by the Ptolemies, of the manufacture of paper out of the papyrus stalk, the increase in the output of paper must have been enormous. The process had been known and used by the Pharaohs from the beginning of the third millennium B.C.; and the use of papyrus for books and accounts was

customary in Athens in the fifth century. But it was in the third century B.C. that papyrus assumed its position as the common writing material of the Hellenistic world. This position it held until the eighth century after Christ. The actual connection of the increase in paper manufacture with the enormous increase in the number of authors and books which marks the Hellenistic age cannot be established in detail because of our lack of the necessary data; but it seems to be obvious that the increased manufacture and use of papyrus sheets for writing was both a sign of the rise in the general level of culture and an agency which helps to explain the increased facility of literary expression.

As soon as Alexander had crossed into Asia Minor to carry on the war against Persia, and had begun to free the Greek city-states of the Aegean coast from Persian rule, one problem of immense administrative and economic importance immediately confronted him. This concerned the system of agricultural landholding of the Persian Empire. According to the system which the Persian kings had inherited from their predecessors in western Asia and in Egypt, much of the arable land was royal domain. Other great stretches were in the possession of the temple organizations. Both of these types of holdings were worked by the peasants of the kings or of the temples, living in villages which were the chief administrative units for the payment of their crop rents and their sundry taxes. To these villages and to their task as king's cultivators or cultivators for the god of the temple, the peasants were bound, their names appearing on the royal records with their village connection. In certain parts of Asia Minor, where Persian overlords had been assigned large domains, the system had taken on a semi-feudal character. Alexander wisely decided that he could not disturb this tremendous administrative machine which had functioned so long. An official letter which he wrote in 334 B.C. to the small Greek city of Priene has come down to us in a copy inscribed upon stone. In the letter he announced his decision that the city should be autonomous and free, owning its own land, both the city real estate and the farms of its citizens. "The countryside I recognize as mine, and that they who dwell in villages there are to pay the rentals." In other words, the royal domain and the peasants of the king were to retain their old status. In Egypt, which Alexander conquered

in 332 B.C., similar great complexes of royal and temple domains existed; and his decision there was necessarily the same.

The idea of ownership of land by the state and its cultivation under a system of helotage, as in Sparta and Thessaly, and that of the large estate system owned by nobles and worked by renters, as in Macedon, were familiar to the Greeks. The dominant system of the city-states, however, had been one of free private land-holding. In this most fundamental and important economic feature the background of the new Hellenistic society differed, therefore, from that of the city-state. No single pattern can be constructed, no one formula enunciated, which will adequately cover the vicissitudes of the royal domain system in the Hellenistic monarchies. In western Asia the Seleucids adopted toward their domain a free policy of alienating it to members of the royal household or to important individuals whose support they required. Sometimes the lands thus alienated were held as revocable grants, sometimes sold outright. The Seleucids disposed also of large stretches to the new city-states as the essential agricultural hinterland of their city foundations. There are indications that it was a recognized method, employed by important Greeks in the troubled period of the forty years immediately following the death of Alexander, to obtain grants of land, mortgage these to a temple for what ready cash they would bring, and allow the mortgage to be foreclosed by the temple treasurers. In this and in other ways the land complexes held by the temples, especially in Asia Minor, became very large. As a rule, however, the requirement was made that land alienated from the royal domains to individuals must be enrolled upon the land register of some city for taxation and record purposes.

The entire political situation of the Ptolemies in Egypt was different from that of the Seleucids. Egypt was a compact unit geographically; and it offered the possibility of complete control by the rulers such as was out of the question in the widespread, loosely knit empire of the Seleucids. Hence we find an economic absolutism established over almost all phases of production in Egypt such as could be attained nowhere else in the world of the time. According to the Pharaonic tradition, firmly rooted in a practise of hundreds of years in Egypt, the arable land belonged to the god-king, not to the peasants who worked it. The Ptolemies had no reason to break with this tradition. They

accepted it, emphasizing in every possible way the theory of their ownership, particularly as against the lands cultivated by the temples. Most of the king's land was held by the Egyptian population as crown renters (royal peasants) under direct lease with the king. A lesser amount was given out to the Greeks, Macedonians and other aliens who formed the mercenary armies of the Ptolemies, to be held and cultivated by them so long as their active service under the king continued. Land reclaimed under the skilful Greek irrigation engineering of the time was given out, under Ptolemy Philadelphus, in immense tracts to wealthy and energetic men for development, this "gift land" being revocable at the king's will. The status and management of one such great tract, comprising 6250 acres situated in the Egyptian oasis called the Fayum, is now known to us in intimate detail. The rents which the Ptolemies derived in wheat and barley from the royal domains, under whatever classification these might be held, made the royal household of Egypt by far the greatest grain merchant of the Hellenistic world.

The same system of domains owned by the king was widespread also in the Pergamene kingdom of western Asia Minor. Inside the limited boundaries of the old Macedonian kingdom private ownership continued to be the dominating system, the peasants owning in fee simple, for the most part, the lands which they tilled. But in the lands of the Balkans outside of Macedon proper which were brought under Macedonian control by the Antigonids, the theory was widely applied that the state, i.e. the king, owned the land. The royal domain system, therefore, was widespread in the ancient Near East when the Roman Republic extended its control into that region in the second and first centuries B.C. Technically these lands became the public domain (*ager publicus*) of the Roman state. In 30 B.C. Cleopatra, the last of the Macedonian Ptolemies to rule Egypt, had failed in her ambitious effort to reestablish Egypt as a great imperial power through the help of Marcus Antonius. The problem of the royal domains of Egypt then faced her conqueror Augustus Caesar, as it had faced Alexander the Great three hundred years earlier. Augustus' solution was that he, as representing in his magisterial position the Roman state, should keep the control of Egypt in his own hands and with it the control of the royal domains. With that decision the problem of the state as great landowner and agricultural pro-

ducer in the lands bordering upon the eastern Mediterranean was shifted to the shoulders of the Roman emperors and their administrative advisers.

WILLIAM LINN WESTERMANN

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III

The Roman World

I. ORIGINS AND EXPANSION. During the second millennium before our era several successive waves of migrants invaded Italy from the Danube and Swiss valleys. These immigrants before 1000 B.C. drove off most of the sparsely settled non-agrarian savages from the arable lands of north and central Italy. The invaders brought with them bronze implements and weapons, employed domesticated animals, cultivated cereals and were beginning to acquire a knowledge of grape culture. In historical times they are found speaking dialects of a common Italic language with a conservatism that seems to imply the absence of extensive race mixing. Apparently they had come in compact hordes, had seized and settled the land, and made it possible to preserve a fairly uniform culture through the larger part of the peninsula.

The new settlers took possession of the Roman and Latian plains about 1000 B.C., at a time when iron was beginning to displace bronze for weapons in Italy. The Latins settled in villages on defensible hills that had springs of water, and apparently divided the lands about the villages into individual lots for cultivation. In historical times (and probably this was an early institution) they usually set apart a portion of the land for public use, and hillsides unfit for cultivation were kept as common grazing grounds. The institution of private property in land seems to have been very old among these people, but details for the early period are lacking; we know only that as early as 450 B.C. the twelve tables recognized an owner's complete testamentary powers as regards his property.

Of the government before the regal period we can learn very little. Apparently, to judge from survivals, the villages annually elected praetors (foremen) and aediles (temple keepers) in town meetings. The communities that made up the Latin tribe also had an annual festival of the tribe and at this festival elected a tribal praetor who could summon and lead the tribal forces in time of danger. Since the Latins had better lands than the mountain folk on the east and south, common defense was probably very important. The old Roman fetial institution reflects the fact that

the plain-lands of Latium were subject to invasions, for the fetial law concerned itself entirely with wars of defense and the procedure of demanding restitution.

When the neighboring regions were settled and raids became frequent, many of the lower village sites were abandoned and the villagers migrated to the stronger communities. Thus, because of danger near by, some seven or eight cities grew up in Latium in place of the many villages. Thus originated the city-state in Latium. The farmers thereafter had farther to go to reach their plots of land each morning, but their families were at least safe in walled towns.

With this important social change—which seems to belong to the ninth, eighth and seventh centuries in Latium and Tuscany—the form of government changed here and there. Some of the Latin cities simply developed the old town meeting and continued to elect annual praetors. In Rome, however, which because of its favorable position received a particularly large accretion of settlers, three villages united in a common government within an extensive earthen rampart. And since one village at least consisted of a non-Latin group, it is likely that a firmer government was needed at Rome than in some of the other Latin towns. Here the town meeting (*comitia curiata*) consisted of three times the ordinary ten curiae, and the elders were organized into a council (the senate) to give advice to the magistrates. Finally, probably during the seventh century, a chieftain (*rex*), holding office for life, was substituted for the annual magistrates. Since the legends regarding the kings are unreliable, we do not know whether this change came by usurpation or rather by choice of the people at some time of great danger. As only the names of the last kings, the Tarquins, are certainly Etruscan, the change seems to have taken place before the Etruscan conquest of Latium in the sixth century. Tradition was very firm in the belief that the advisory council of elders existed through the regal period and that the people elected the kings. What the principle of organization of the town meeting of the thirty curiae may have been we do not know. Clan feeling was

very strong at Rome, as is shown by the late survival of *talio*, and tradition held that the heads of families made up the assembly, but that does not prove that it was organized according to *gentes* (clans). The word *curia*—derived from *con* + *vir* (meeting of men)—is quite non-committal. At any rate, during the regal period this assembly lost much of its importance, for when the republic was restored a new assembly by hundreds (*comitia centuriata*), consisting of property-holding men of military age, constituted the town meeting. This is apparently a military assembly that had grown up during the period of warfare inaugurated by the Etruscan usurpers.

During the later regal period, at least, Etruscan princes were autocrats in Rome. About 500 B.C., however, these foreigners were expelled by a revolution, and the old republican form of government was restored. This new republic of Rome attempted (as we learn from the first Punic treaty) to control the whole of Latium, but the treaty of the Latin league, signed a decade or so later, shows that it failed in this attempt. Rome had to be satisfied with less than half of Latium and with a treaty that recognized the equal status of the other Latin cities. However, Rome's leadership was recognized in time of danger, and it became the dominant city in a league which after some time was strong enough to repel all attacks.

The government of the city was now of the old Italic type with a few modifications. The men capable of bearing arms constituted the primary assembly, but since the wealthier, who could provide good armor and horses, had to bear the brunt of the fighting, these were also given the weight of influence in the assembly. That is to say, while the people were divided into five classes according to property, the votes accorded each class were so weighted that the centuries of the first class together with the horsemen controlled the assembly. This assembly elected the magistrates and also made all important decisions. The two annually elected consuls were the executive magistrates. They had at their service for advice a senate of about a hundred nobles, normally including the ex-magistrates.

Under the last of the kings Rome had grown to be one of the largest cities west of the Adriatic Sea. But with the severance of Etruscan connections, the banishment of the court, the loss of Latian subjects and the lapse of building operations and of commercial enterprise, Rome fell into a long decline, during which the mountain-

eers raided far into her territories. After a century of hazardous experience, however, Rome at the head of the league slowly began to make territorial advances into Etruria and then against the Samnites. Rome now formed a new and larger federation on lines that seem to have been novel in the ancient world, a federation whose strong support is largely accountable for Rome's unusual success. There are two simple but important principles apparent in this federation: one, that in all compacts signed by it Rome was to retain controlling power in any common action; the other, that the members of the federation were not to be affronted by the exaction of a tribute or by any other visible sign of inferiority. Colonization was carried on by the federation as a whole; the newer municipalities were incorporated in the Roman city-state with local autonomy and yet with full participation in the Roman assembly; municipalities farther away, not yet ready for such participation, were placed in a probationary stage with half-citizenship; while the outer circle of cities or tribes was given defensive alliances which provided the protective power of the whole federation in their defense. This was a federation based upon an intelligent self-interest seasoned by a comprehension of partners' interests that in time made Rome very strong.

However, the result of the expansion of the federation was of course that its frontiers abutted on a very large number of barbaric tribes; so that quarrels were apt to arise on some border at any time, and the temptation to use the great force put at its disposal for the advantageous adjustment of such disputes was naturally irresistible. As a result its forces were usually engaged in warfare at some point or other, and before the federation had been in operation for a century it had absorbed the whole of Italy from the Arno to the heel of the peninsula, and the Roman city-state, which was still a small fraction of the whole, was the controlling element throughout. It is a curious fact that this period of rapid expansion was precisely the period during which the plebeian element gained the right to hold magistracies and to organize a new legislative assembly based not upon wealth but upon local groupings where the principle of equal manhood suffrage was recognized. It was in a period of popular sovereignty that the city-state of Rome made its most daring ventures in territorial expansion.

Rome's arrival in the south brought her into contact with new neighbors who soon presented

her with a set of tangled problems. Whatever the underlying forces were that impelled Rome and Carthage to clash, it is clear that Rome found it difficult to avoid the logic of the situation in which she was placed. When, at the request of Messina, she entered the First Punic War, it was evidently to protect from the encroachments of Carthage a city (Messina) that had appealed for admission to Rome's league. An important factor in the beginning of the Second Punic War seems to have been the plea of Marseilles, Rome's close friend and the commercial rival of Carthage. At the end of one war the senate was induced by a war-incurred debt to abandon the ancestral policy of exempting new acquisitions from tribute, and made of the cities of Punic Sicily not allies and "equals" but tribute-paying subjects that had to be held by a standing army against revolt and invasion. At the end of the second war Spain, which had been occupied for strategic reasons, was reduced to the same status. Rome was now an imperial democracy. The success in these wars had changed the very nature of the Roman constitution.

Rome's expansion eastward was in many ways even less fortunate. Her intervention in the affairs of the Greek states was an ill managed experiment in sentimental politics. It cost her both trouble and prestige, and led through a series of bickerings, treaties and revolts to the destruction of Corinth and the reduction of Macedonia to the status of a province. This experience was followed by a period of caution, during which expansion was out of favor. But with Pompey expansion of a new kind began (67 B.C.). The Gracchan system of tax gathering had raised up a strong group of capitalists who profited from public contracts. When the revenues of Asia were menaced by the raids of Mithridates, these capitalists advocated the pacification of the Orient and the inclusion into Roman provinces of as large a part as possible. This financial power found a sympathetic agent in Pompey, who was sent east ostensibly to check the invaders but actually to pacify the oriental world and lay it open to the financial operations emanating from Rome. He did his work thoroughly. The contract system of tax gathering was extended—although in a milder form—over all the Asiatic provinces, so that the revenues of the state were nearly doubled and the operations of the capitalists enormously increased.

Caesar's invasion of Gaul (58 B.C.), on the other hand, was a simple act of military aggres-

sion, instigated by personal motives rather than by the desires of a class or by large considerations of state. His plans and preparations show that he was primarily bent on raising an army with which to make himself the most powerful man at Rome. Thus the inclusion of the last great province was in a measure an accident. However, with Caesar we reach virtually the end of territorial expansion. Since there were no longer any strong powers to fear, nor the need of winning distinction and prestige through military achievement, the emperors could safely limit themselves to finding and adhering to sound frontiers. Such frontiers were established by Augustus and were in general accepted by his successors.

The conquest and organization of a vast empire by a city-state was a unique event in history. The secret of success seems to have been the capacity to form and control an expanding federation of autonomous peoples while the whole of Italy was being secured. Eventually, when success had blinded the senate to ancestral methods and many of the nobles had fallen into the temptation of political exploitation, the state could nevertheless continue to expand successfully because of the momentum won by the sacrifices of the fourth and third centuries.

II. SOCIETY AND ECONOMIC CONDITIONS: THE REPUBLIC. The republic was founded and organized by "patrician" landholders who considered themselves superior to the common folk by reason of their descent. At the time they alone could hold magistracies and priesthoods and they alone had a vote in the senate on the most vital matters. This does not necessarily mean that they owned large estates. Many seem to have been active farmers and, with the intensive hoe culture of the day, a man could hardly till more than ten acres of land. Legend, at least, insists that some of the old consuls, like Cincinnatus and Curius, worked their own lands. When the plots were larger, we must assume that they employed renters, free laborers and to some extent slaves.

The "plebeians," who could vote but could not at first hold office, were apparently numerous. The origin of the class is obscure. It is usually assumed that they were Latins who had in the course of time lost their farms by ordinary economic processes and had, especially during the Etruscan occupation, become laborers and artisans and dependent renters. It may also be that some of them were liberated serfs. There is

no support for the old-time hypothesis that they belonged to a conquered race.

Since Rome's power and resources dwindled after the restoration of the republic, and commerce and the crafts declined, there was much economic distress during the fifth century. And since custom permitted enslavement for debt, and the patrician possessors were not inclined to give relief, there was a steady demand on the part of the plebeians for political recognition whereby they might improve their condition. Not much progress was made until after Veii was captured in 392 and a large part of its land distributed to Romans. The humbler citizens apparently received these allotments, for we learn that four new country *tribus* were then made. This increase in the number of property-holding plebeians apparently gave them the prestige that enabled them gradually to win complete equality with the patricians. Thereafter the term patrician represented only a hereditary distinction of no great significance, for in the third century a new social *nobilitas* of more practical value in politics grew up, a nobility of families, whether of patrician or plebeian origin, descended from anyone who had ever held the consulship.

From the capture of Veii (392) to the First Punic War (264) the aspect of Roman society did not greatly change. Agriculture continued to be the chief industry. There was relatively little maritime trade, if we may judge from the evidence that archaeology has left. Rome developed no distinctive craftsmanship, though here and there nearby towns like Palestrina made their mark in fine metal work. However, a fairly large artisan class grew up for the supplying of ordinary household ware, farm implements, arms and armor. And the activity of Appius Claudius in his censorship (312 B.C.)—building an aqueduct for the poorer district of the city and enrolling the urban poor in whatever ward they might select—indicates that the free urban proletariat was strong enough to demand attention. But in general the outstanding fact of this period is that a gradual colonization of lands taken in wars kept Roman society directed landward, and society on the whole remained of the type associated with the name of Cincinnatus. It was a society such as Thomas Jefferson considered the ideal for his day.

During the first period of foreign wars (First Punic War, 264–241; Second, 218–202) there was again no great change at Rome except that in assuming direction of these critical conflicts

the senate grew in importance and prestige, and the senatorial nobility came more and more to stand apart in the esteem of the commons. It is in this period that the new aristocracy, by sheer accomplishment in an epoch of very great danger, established the tacit custom that, except in very unusual cases, only the political nobility was to be trusted with high office.

The spread of the plantation system as a result of the Second Punic War led gradually to a very great social change. During the war small farmers had been cut down mercilessly in battle, so that much land was on the market and more fortunate survivors could expand their estates. Moreover, as a result of the devastation caused in southern Italy and in the Po valley, the state expropriated extensive areas. Only a part of these could be colonized at once; naturally the northern portion, which was in danger of being reoccupied by the Celts, was settled first. It was usually settled in moderate-sized lots. In order to make the southern lands productive to some extent at least, they were rented out in large tracts at low rentals to those who would take them. The senators, who made this provision, were largely the ones who took the leases. The lands went into grazing and to some extent into wine and olive raising and, since free labor was scarce, the landlords purchased war captives and Greek slaves for the development of their ranches and plantations. It is very likely that some of the expansion in Spain, in Liguria and in Epirus was pushed with greater vigor than political policy required simply because the generals in command were aware that Italy could absorb a large number of slaves. Thus during the period between Scipio and Tiberius Gracchus the aspect of Italy changed to a considerable extent. Plantations spread rapidly over the better lands, and in the south large ranches extended up into the hilly country. Small farmers were still quite numerous, however, especially in the foothills and mountain valleys of the central Apennines. During the first thirty years the agrarian youth—none too numerous—who found opportunities denied them at home took colonial plots in Cisalpine Gaul. When these plots gave out (about 170 B.C.) it became the custom to cross the Po and try one's fortune among the Celts of Lombardy.

Apparently there was still not much maritime commerce among the Romans. The Greeks of south Italy and the Greco-Oscan population of the bay of Naples were active on the sea, and some Roman funds seem to have found place-

ment in their enterprises, but not many. The inscriptions of Delos—which was the center of Mediterranean trade after the destruction of Corinth—give a clear picture of the commerce of this period. They reveal very few traders from Rome before the first century B.C., but very many from Asia, Syria, Alexandria, Greece, and not a few from the Greek cities of Italy that were allied to Rome and that profited by Rome's policy of requiring open ports for her allies. The fact seems to be that the opportunities in land exploitation opened by the Punic War and by the new system of farming with slaves attracted most of the Roman capital landward again. When Tiberius Gracchus—a young aristocrat who had read widely in stoic philosophy—reached the tribunate in 133 B.C., he observed that those parts of Italy which had formerly been occupied by numerous freeholders now chiefly supported slaves, and that because of the scarcity of free men of property Roman consuls had difficulty in making up their levies when a war broke out. He also remarked that many Romans had grown wealthy by illegally squatting on public lands or occupying the public lands which their fathers had enclosed, and that all this time an urban proletariat was growing up which found no way of making a living.

One might expect that, with the increase of wealth in the numerous large households and the herding of poor free labor to the city, some distinctive industry might have arisen at Rome as at Capua. But this did not occur. Indeed the artistic bronze and silver work for which the neighboring Praeneste had been known—and one of the finest pieces found bears the signature of a Roman—actually ceased to be made at this time. The explanation for this trend seems to be that, on the one hand, the recent campaigns in Greece and Asia had attracted attention to the beautiful wares and articles being wrought in the East, so that imports from there captured the best markets at home, and that, on the other, large households frequently had skilled slaves who supplied the rougher articles. Villa slaves certainly were trained as smiths, masons, carpenters, joiners, cobblers, makers of clothing and to some extent even as jewelers. It was also true that emancipation was very common at this time and that skilled slaves set free often became humble craftsmen who supplied articles of mediocre value in small individual shops. Conditions, in fact, were not at all favorable to the rise of an industry that could compete with those which had been established long ago in the more

advanced East and in the old Greek portion of Italy.

Roman society remained agrarian-military. The aristocracy, drawing its livelihood from slave labor on large estates, not infrequently from a general's share in booty, and occasionally from a shrewd marriage, and basing its claims for social distinction upon ancestry and political office, remained a close corporation of less than a hundred outstanding families living in one city. The men were generous in their devotion to political and military service, laboring incessantly—whether on foreign missions or arduous campaigns or conscientiously attending the sessions of the senate and the courts. For the most part they still revealed themselves as men of integrity in dealing with subject nations, and as men of puritanic instincts in their social relations at home. But they were also growing imperious toward provincials, harsh toward their "allies" in Italy, inconsiderate in their treatment of their slaves, and they were beginning to insist upon the preservation of the status quo and to interpret the political practises of their own day as unalterably final. A middle class still existed, to be sure, consisting of those landholders who had not broken into the ranks of the nobility, certain state contractors and a few men who had made some profit in money-lending and in commerce, but it was not strong enough to receive much attention from the ruling class. A lower class of poor farmers and shopkeepers also clung to the civilized fringe of society. Below were the large hordes of slaves, ready to do what old Romans considered "dirty work," but emerging by gradual emancipation into Rome's populace.

The Gracchans tried to alter this state of things by colonizing the urban poor on lots to be reclaimed from the squatters' estates, by organizing a strong middle class of *equites* who were to have the privilege of profiting from more state contracts and of being recognized in the panels of the law court, by encouraging Roman commerce in the colonies planted at Carthage and in south Italy, and finally by restoring some governmental responsibility to the tribal assembly and at the same time reducing the powers and pretensions of the senate and the aristocracy. The program was carried through, but received no fair trial because after the murder of Caius Gracchus no leader arose to direct its machinery. The middle class, however, became a power through the Gracchan reforms and frequently checked the aristocracy, but being built up on the privileges afforded by state contracts this

group became in time a menace to good government by leading the way in the exploitation of Rome's subjects. As we have noted above, it was these contractors who were largely accountable for the expansion of Rome through Asia and who used Pompey as their agent. The last half century of the republic was to no small extent a struggle between the senate and the equestrian order for an advantageous position from which to harvest the profits of imperialism.

By Cicero's day all Italians were citizens of Rome. The body politic then included not only the classes mentioned above but a much extended group of small farmers of the hill region, the merchants of the south and the industrialists of Capua, Tarentum, Puteoli, Arretium and other places. These new peoples, however, were too far away to be effective influences in the Roman primary assembly, and the men who controlled Roman politics were not so eager to give up their power as to substitute a representative assembly constituted from the whole of Italy for a docile primary gathering. Caesar, when he became dictator, was the first to recognize these new elements in the city-state, and in his colonization and in his economic program he considered the needs of merchants, artisans and manufacturers as well as of agrarians. His death, however, checked progress along these lines.

Indirectly Caesar's rejection of the tax-contract system instituted by Gracchus damaged Roman commerce severely. The publicans had gathered the tithes in kind and had been compelled to build up a shipping and distributing machinery to dispose profitably of the produce, and this had drawn them into trade. But Roman shipping was as coy as American shipping has recently been. When the immediate necessity vanished, the carrying trade fell away to the easterners who were more accustomed to it, and the Roman *negotiatores* then confined their activities to financing estates that were falling into Roman hands. In the early empire Rome was living not on commerce and industry but largely on returns from capital invested in Italian and provincial lands and mortgages.

III. LAW. Rome's foremost gift to civilization was a great digest of laws. That digest was made at the end of a thousand years of legislation, but even at the beginning the Romans seem to have revealed a striking respect for orderly procedure. Nowhere else can one point to a government resting upon a primary assembly which during several hundred years worked out a series of civil

revolutions by reasonable compromise and without bloodshed. We do not yet know enough about racial inheritance to explain such behavior. One may of course point to the influence of environment and recall that centuries of experience in defending fertile lowlands against hungry mountaineers would naturally breed respect for property rights; that early experience with world wide commerce in the days of Etruscan domination compelled the Romans to devise liberal forms of contract; that the traditions of individualism which long prohibited the formation of a strong central government elevated the patriarchs and the patriarchal family, which in turn encouraged the formation and safeguarding of estates, and that this evoked well considered laws of property and of inheritance; and finally that the long survival of an aristocracy insured continuity in legal conceptions. We may admit all this and still be compelled to assume that the ancestors of the early Latins who invaded Italy had already, by some hard process of environmental elimination of the discordant, coalesced into a racial group possessing fairly uniform physical and temperamental characteristics. Archaeology has shown that the invaders were land seekers who came and took their land in compact groups; and linguistics, by contrasting the conservatism of early Latin with the wreckage that occurred in the race mixtures of the early Middle Ages, supports the conclusion that the Latin groups long remained relatively homogeneous. It may well be that what we consider traits of Roman character were in large measure a common inheritance of the Italic peoples from prehistoric times.

In coming to a survey of Roman law it is not worth repeating what Roman antiquarians said of the putative laws that antedated the decemviral code. The evidence is too infirm. The fragments of the twelve tables, on the other hand, give a fairly reliable picture of the legal customs of the middle of the fifth century B.C. They are so thoroughly Roman in character that the old hypothesis of a possible borrowing from Greek need not detain us. This code contains a somewhat broad collection of civil, criminal and religious law. Some of the sentences on civil matters are more advanced than one would expect from a people in their state of culture. For instance, the formal mode of purchase in the presence of five witnesses applied only to land, slaves and cattle; all else could be sold by informal *traditio*; contracts, loans, mortgages and trusts were provided for by fictional forms of

sale, and in all these the rule applied that the spoken word (witnessed, of course) was valid. The law of the twelve tables did not spring out of the primitive rural economy imagined by Mommsen's day but out of the experience of the early commercial city which the spade has now disclosed to us. The fifth table seems to permit a father to leave his property by legacy outside of his family, a progressive measure which may have arisen in an aristocratic society eager to conserve estates in the hands of some responsible person who would thereby be able to meet the political obligations expected of landowners. On the other hand it is a mark of a strong democratic feeling that early law did not recognize primogeniture or distinction of sex in inheritance.

In criminal law we meet with a conservatism that is due to the lack of an executive machinery belonging to a strong central government, which in turn reflects the survival of patriarchal customs. For instance, theft, fraud and personal injuries were still left in the civil code for private initiative to deal with, and although retaliation was not recognized, the right of *talio* is kept as a factor of compulsion in order to force the culprit to submit to judgment. This is doubtless due to the very slow acceptance of administrative obligations on the part of the government and to the long survival of patriarchal customs. Peonage for unpaid debt was still permitted, but the assumption that the creditor could slay the debtor has been proved to rest upon a misinterpretation of the evidence. We also find that at Rome as elsewhere custom was slow to substitute civil procedure for what could be accomplished by religious awe. A sentence of the eighth table reads: "He who burns another's grain shall be under the curse of Ceres." That is, the culprit was outlawed. The state did not assume obligations where old religious traditions were still effective.

This codification of custom had a certain retardant effect in that it tended to stereotype procedure and precedent. However, in several instances where the publication of custom revealed incongruities with progressive experience, it helped to provoke criticism and thus promoted precision in legal thought. So, for instance, the prohibition of marriage between a patrician and a plebeian was presently corrected by statute. Similarly, in the next century, when the institution of coinage led to easy money, speculation and debts, the people passed a bankruptcy law which indirectly discouraged the enslavement for debts permitted by the code.

In 366 B.C. the consul was relieved of judicial duties, which were then assigned to a praetor. This new magistrate could give his whole attention to administering justice. He was not necessarily a legal specialist, but he was a senator and as such was supposed to be familiar with much of the law. The early praetors apparently won the confidence of the people by their judgments, for the primitive custom of according discretion to the judge was not later hampered by regulation. In fact the praetor's powers were tacitly permitted to grow and were actually enlarged by the Aebutian law until he assumed considerable liberty, by means of legal fictions, to interpret old laws in conformity with contemporary ideas. These interpretations would be recognized in formulae set forth in the annual praetorian edict, which came to be considered valid in law unless abrogated by statute. Thus Roman law was largely judge-made and was kept abreast of changing conditions.

In the third century (242 B.C.) a new court was instituted to pronounce judgment in cases arising between citizens and foreigners and also between two foreign litigants. This proved to be all-important in the development of Roman law. Since the civil law was applicable only to citizens, foreign trade would be discouraged unless non-Roman commercial practises were recognized as valid in the Forum. The institution of a court for foreigners was not a Roman invention, for several Greek trading cities, as well as Carthage, had the custom of keeping an official arbitrator at the harbor in order to settle disputes and thereby encourage trade. The institution, however, gained special importance at Rome because Rome's civil law could so readily absorb the liberal customs of the peregrine court, because Rome's stable government gave an unusually long term to such a process of absorption, and because Rome's management of her federation also assumed the necessity of equitable dealing with non-Romans.

It is a mistake then to suppose that respect for *aequitas* and *jus gentium* came in with stoicism in Cicero's age. To be sure, we find the phrase *jus gentium* first in Cicero, but we do not happen to have any pre-Ciceronian prose in which it could well occur. Since ninety-five percent of republican Latin has been lost to us, we dare never draw conclusions *ex silentio* regarding the dates of republican customs. In Cicero's day the phrase was well established with two distinct meanings, the one here referred to, in which *jus gentium* includes the accepted customs of civi-

lized peoples in commerce and communications, the other in which the term refers to the accepted practises of civilized peoples in wars. In the rules of warfare Rome showed a sensitiveness to foreign custom at least as early as four centuries before Cicero; in commercial practises it is probable that trade with Carthage and Sicilian Greeks created a recognition of *jus gentium* as early as the sixth century B.C. Certainly the institution of the peregrine court in 242 assumes the existence of a term with which to designate the body of custom which the court was expected to respect.

Similarly there can be no doubt that the recognition of *jus gentium* was associated with a respect for *aequitas* long before these two phrases occur together in Cicero. That the whole Roman federation was based upon the principle of *aequitas* is shown by the fourth century treaties of *aequo foedere*. And most of the strangers with whom Romans had to deal in the peregrine court were in fact members of states which had such treaties with Rome. The very aim of the institution was to prove that such treaties meant what they said even with respect to minute dealings between individuals. The historian of Rome must accustom himself to find Rome's deepest thought embodied in institutions rather than in philosophical formulas. In other words Rome had assumed and put into actual practise the principle that *aequitas* was superior to *lex* long before philosophic teachers had formulated a theory to that effect.

Nevertheless stoic philosophy also played an important role in the shaping of Roman law, though this came later. Stoicism in Greece took no part in politics until after Alexander's conquest of the East gave Athenians some knowledge of a great territorial state, and the subjugation of Athens itself suggested the desirability of a humanitarian philosophy with which to check Macedonian autocracy. Then it was that Chrysippus began to teach universal brotherhood and to insist upon the instinctive nature of justice and equity. That such theories should spring up among the misgoverned and suffering victims of tyranny is to be expected. But that the jurists of a proud and victorious people like the Romans accepted them as the basis of their law is more surprising. In his *De republica* and *De legibus* Cicero very explicitly accepts these stoic teachings, using them as a foundation for his political doctrine; and it was probably his friend Sulpicius, the keenest jurist of the day, who first adopted the stoic theory of a natural instinct for

justice as a basis for juristic philosophy. But Cicero is careful to show that Roman government had a definite historical continuity in native practise. He gladly adopted the new-found stoic phraseology, but he was well aware that in juristic as well as in administrative practise the principle had long been recognized at Rome that statute must conform to the dictates of *aequitas*. This is why Cicero is so ready to do deference to what he calls *jus gentium*, why he holds that justice rests on intuitive right reason and that law not based thereon has no real endurance. By the day of Gaius *jus naturale* is quite regularly the synonym of *jus gentium*.

The jurists, whose *responsa* were extensively rescued in Justinian's *Digest*, continued the work in the spirit of the republican praetors, drawing anew, however, from the stoic writings which were again popular in the second century A.D. Thus it came about that throughout the *Digest* discussions are apt to go back of laws, edicts and rescripts to principles of "equity" and "natural law," and that the code was based upon general principles which were universally applicable.

In international law a tendency in the same direction was hindered by Rome's rapid expansion. Here too a *jus gentium* (i.e. the accepted customs of nations in war) had sprung up, which, protected by religious awe, was well on the road toward an international code, when Rome's dominance interfered. Autocrats do not arbitrate within the sphere of their supreme control, and Rome controlled the world. However, in the early days of the federation Rome's principles in dealing with her allies had been very much like those which she expected to be applied in the Forum. And Roman writers like Livy and Cicero are not aware of a theory (popularized in modern times) that magistrates working in behalf of the state are excused from obeying standards of conduct expected of private individuals. The statement frequently made that Cicero considered Roman provinces national *praedia* to be exploited at pleasure simply is not true. In the passages that are usually cited to substantiate the view Cicero is not speaking of whole provinces but of limited public areas. It is not an accident that Rome's history reveals relatively fewer rebellions on the part of subjects than any other history of ancient times. Rome did not write an international code comparable to her civil code, but on her practises as recorded by Livy and Cicero, and on the apposite interpretations provided by the

Digest, the early founders of international law were able to base a respectable code of rules.

IV. GOVERNMENT. In the construction of their own constitution the Romans were far more apt to feel their way through experiments than to devise well-rounded documents on tablets like the Greeks. To one principle they adhered for many centuries: they felt that they were capable of ruling themselves and they rejected an absolute monarchy as unendurable. Every citizen must have a voice in the government. However, the early government laid the heavier burdens of responsibility, in the army as in the government, on those who possessed property and distinguished ancestry. The slow emergence of the plebeians, who at first occupied a very inferior place in the assembly, led through compromise—and compromise was distinctive of Roman politics as compared with Greek—to an illogical excrescence on the constitution, i.e. the tribunate with a separate plebeian assembly. In order to preserve a timocratic magistracy and lawmaking body without incurring civil war, the aristocracy, after two centuries of slow yielding, allowed the tribal assembly of plebeians who elected the tribunes (personal advocates of the poor) to assume full legislative functions (287 B.C.). Theoretically a part of the people—though a very large part—might now legislate for the whole. Perhaps the discrepancy in logic was excused by the fact that the tribunes as members of the aristocratic senate were conceived of as representing that body. Be that as it may, the important points were that the new assembly voted by wards without property qualifications, and that its acts were not amenable to senatorial veto. In theory, therefore, Rome was now ready to try absolute popular sovereignty. However, since all ten of the tribunes had to acquiesce before plebiscites were proposed, and since tribunes who offended the senate could readily be kept from political advancement, the possibility that this assembly would initiate radical measures was not great. It proved indeed to be a safety valve to prevent rebellion, a kind of popular referendum during periods of great stress, and finally it served in times of concord as a convenient body in which the senate could expedite needed legislation.

Soon after this assembly won its great power, the foreign wars began and the people, recognizing their limitations, quietly allowed the senate to assume responsibility and leadership. During that century (260–150) the assemblies

usually voted as the senate requested. In the middle of the second century Polybius, an intelligent Greek statesman who had lived for years at Rome, first as a political hostage, then as a friend of the Scipios, wrote down his impressions of the Roman government. He was greatly pleased especially with its “checks and balances”—a phrase which by a devious route has come to us from him. He observed that the executives were practically autocrats at the very points where power was essential, but that otherwise they were checked by limitations of time and by senatorial courtesy; that the aristocratic senate (the administrative body) had enough power and continuity practically to direct the policies of state without the liberty to go to extremes of conservatism; finally that the democratic assemblies (electoral and legislative) were in theory sovereign, though so well tied in by veto and parliamentary rules that they could hardly run amuck as the assembly of Athens had done.

Polybius is not far from correct in this description which, through its influence upon Cicero's writings, has also left consequences in modern politics. His observations were somewhat too much affected by Greek political philosophy, especially by that of Dicaearchus, who had advocated an ideal combination of monarchy, aristocracy and democracy. Fortunately for Polybius, he happened to see Rome at the very time when the senate was tacitly usurping functions beyond its legal powers, and when the Gracchans had not yet fully revealed the capacity of the assembly. He happened in fact to find something resembling the ideal state of Dicaearchus in operation.

In one respect Polybius' analysis came short of acumen, for by describing the Roman constitution in terms of Greek theory he somewhat dulled his own version and thereby hampered political thinking later. In Greek politics economic motives had played a very important role. Forms of government were associated with economic classes. When in Greece a political battle was waged between aristocrats and democrats, it was usually a battle between possessors and paupers, and too frequently revolutions resulted in a complete change of property. Polybius knew of dozens of revolutions of that kind. Hence he thought in terms of classes and functionaries representing classes rather than in terms of functions of administration. At Rome there had been class struggles, but the purely economic motive had never been strong enough to lead to bloodshed. Aristocracy had not as yet

become plutocracy. The senate was after all a group of ex-magistrates once elected to office by popular vote. The centuriate assembly which elected the consuls was not a horde but a gathering of citizens with votes weighted according to property. But the most important point that Polybius failed to recognize was the fact that the Romans had slowly built (unconsciously perhaps) toward a classification by function. In separating the praetorship from the consular office in 366, they had somehow discerned that judicial and executive functions were and should be kept distinct. In permitting the senate, consisting of ex-magistrates, silently to direct foreign policy and to become an administrative body, they had shown prudent comprehension if not acumen, for thus an administrative group grew up separate from the executive as well as the legislative group. And finally when they kept the old assembly chiefly as a conservative electoral body while allowing the tribal assembly to organize as a legislative body, they had again felt their way toward a wise division of functions. Had Polybius been a very keen observer, he might have made the fruitful distinctions recognized long after him by Montesquieu, who advanced from a study of Polybius to an examination of the English constitution. Cicero unfortunately followed the flattering description which Polybius had made, and Roman political thought suffered thereby.

The Gracchi also, too much influenced by Greek ideas, thought of the plebeian assembly as an organ of social redress, working in its own interest. They strove hard to reestablish the theory of popular sovereignty, whether or not with a view to greater reform when their immediate aims were accomplished, we do not know. At any rate their revolution inaugurated a new class struggle in which material ends came to be the chief prizes, and Caesar took advantage of the schism to vault into power.

V. HISTORIOGRAPHY. The attitude of the Roman annalists toward their records and their own observations changed from time to time. The beginnings are quite different from those of Greece. In Greece literary epic and narrative for popular consumption came early, whereas the keeping of full official records came later. At Rome the archives were stored with accounts, laws, treaties and priestly annals for three centuries before any one wrote Roman history for general readers. This distinction marks a difference which is worth observing in considering

the early annalists. In general we find in Roman historiography the following epochs that can be distinguished by general tendencies: (1) the period of the early statesmen-annalists before the Gracchi; (2) the period of the romantic popularizers working in the manner of Hellenistic writers; (3) the period of the antiquarian researchers in the days of Cicero and Varro; (4) the period of Livy and Tacitus, who while profiting from the methods and fruits of research insisted that history should be literature.

In the first period the writers were all senators who had been trained as lawmakers, judges and administrators. Schooled for their tasks in a day when there were no convenient compendia, they were accustomed to memorize the twelve tables word for word, and to keep in mind for use in senatorial debate the gist of the treaties made with scores of neighboring states. They were conscious of the importance of the official word. Of primitive legend there was, to be sure, no criticism, and when they chose to record this, as Fabius Pictor did about 200 B.C., they set it down as it came to them. But when dealing with the early republic, where some archival material was available, they adhered to it quite closely and avoided dressing it up with oral tradition. For the period that fell under their own eyes and the eyes of old witnesses still living they supplemented archival materials with what they saw or heard from reliable men. Although, in discussing the causes of contemporaneous wars and class contests, they naturally revealed the prejudices of their class and their nation, they seem to have made as serious an effort to be objective as they would have made on the judge's bench and in the council chamber. The antiquarians of Cicero's day found the books of these first historians exceedingly dry and crabbed, but recognized them as good storehouses of facts. Only fragments have survived from these writers, but Polybius, who based the Roman part of his valuable history upon them, has preserved the substance of their work for the century preceding his own activity. Since Polybius came from Greece at a time when historical standards in his own country were at their lowest, it is probable that he, despite a conviction that Fabius was sometimes blind to Punic arguments, learned his method and acquired his respect for the exact wording of records from Fabius, his chief source. Polybius, the foreigner, could readily attain objectivity in relation to Roman affairs and, having at hand Punic documents which

were not available to Fabius, he could correct Fabius. Unfortunately when he wrote of his own Achaeans he too was swayed by nationalistic prejudices which must be discounted to some degree.

The second period of Roman historiography marks a very serious decline. Primary education was now general and a growing public of readers demanded popular histories. Many writers sprang up to supply the need. Greek historical romances of the worst period were taken as models of how to be picturesque and dramatic. To get the necessary substance the writers searched out the legends of the heroic age that circulated in the households of old noble families. Many of these legends might have been confuted by reference to the archives, but if the legend was more interesting than the facts, it was too often preferred. We need not necessarily assume that the legends were far from the facts, for these families themselves possessed valuable archives of their own, two or three hundred years old, containing speeches made in the senate, minutes of senatorial discussions, sometimes also military instructions. Furthermore the Romans were legal-minded and were not given to inventing elaborately. But the point is that the numerous writers of the second period had frankly adopted the ideals of Hellenistic history, using no adequate critical standard for their work. Hence we are helpless when confronted with much of the history that covers the fifth and fourth centuries—the period which received the heaviest padding in the Gracchan days. We should also add that this was a time of very bitter class struggles when several of the leaders wrote autobiographies purely for apologetic purposes. And these also lowered the standards of accuracy and provided biased materials for later writers.

In the third period there was something of a reaction against the popularizing romancers, since men of better education had grown suspicious of what was being provided, and statesmen needed reliable books of reference. The encyclopaedists of Varro's day rescued from the archives much material which later historians could use. The methods of criticism, however, were not of the best, especially as linguistic science had not developed to the point of providing reliable criteria. And no great historian arose to demonstrate what could be done by adhering to exacting standards of accuracy.

Yet the wholesome effects of this period of research were not lost. Livy, who followed, was

not an antiquarian—he wrote with too great speed and he desired to produce good literature. He is not to be judged by his first books, however, for he frankly states that in this part the available story is legendary and that he tells it for what it is worth as a story. Here and there we find that he has made serious mistakes. And although he often makes a serious effort to be objective he is also very nationalistic, as all Romans were in his day. For biased judgment, however, he probably has no passage that can compare with Mommsen's amazing portrait of Caesar. What he has learned, even when he has not the patience to delve in the archives, is that for the historical period the popular story which passed current in his youth is to be checked up by the constant use of the dry early annals. That he had not time for independent research is comprehensible when we recall that his history was about twice as large as the first six volumes of the *Cambridge Ancient History*. His value lies in his employment of the best secondary sources for the historical period, in his ability to reproduce the fervor of Rome's political energy, and in his vivid literary art.

Tacitus had about the same attitude toward his sources as Livy, although he more frequently went to primary documents. His personal prejudices in the selection of material and in his partisanship are more patent; his dramatic qualities are given freer play; and his powerful style, adapted to satire rather than to historical narrative, reminds one of the more epigrammatic pages of Gibbon. After these two writers historiography again suffered a decline. The two Greek historians who wrote on Roman history later, Appian and Cassius Dio, followed the romantic tradition of Hellenistic history without its capacity for literary composition.

VI. MONARCHY. When Caesar had defeated Pompey in the Civil War, it was a foregone conclusion that he would not surrender his power as Sulla had done. The empire, stretching from London to Damascus, from the Rhine to the Sahara, must have frontier garrisons along a line of several thousand miles, and these garrisons must have an unquestioned master if the civil wars were to end. The primary assembly of citizens within reach of the Roman polls was wholly unfit to govern such a vast empire, the provinces were in no way ready to share in the rule through representatives, nor could they quickly be Romanized in spirit with the slow means of communication of that day. No more

could complete power be trusted to the senate, a group of jealous and ambitious nobles who had so long been severed from direct responsibility to the people that they had lost popular respect and confidence. The time for a monarchy had obviously arrived, but it was very dangerous to say so in the face of five hundred years of popular government.

Caesar forced the expiring government to grant him a temporary dictatorship, for which there was abundant precedent. Then he set at work discreetly to devise means by which he might wean the Romans away from republican traditions toward a monarchy that, unlike the dictatorship, might give him an unlimited term. Absolute monarchy seemed to be the only form that would be strong enough to override attempts at popular revolution and to keep all the armies in leash, and the history of Alexander and his successors taught Caesar that the only monarchs who had succeeded were those who claimed and imposed the claim of superhuman descent or inspiration. Mysticism and religious awe must be called into service. Hence, as Eduard Meyer has shown, Caesar, like Alexander, encouraged rumors of divine descent and invited the bestowal of divine honors. Before his death the senate had proclaimed him of divine origin and voted him the attributes of divinity. But Caesar had acted too speedily. The Romans (except for the urban rabble) were not ready for oriental mysticism. They might have grown accustomed to the required phraseology had Caesar given them time to find apologetic interpretations for it, but he was in a hurry to begin his conquest of Mesopotamia. The revelation of his intentions shocked the senate and he was struck down.

After thirteen years of intermittent civil war Augustus secured complete control of the empire by defeating Antony. He was too shrewd to invite disaster by following Caesar's road to theocracy, although in the first struggle he tried to profit by calling himself the son of the *divine* Julius—presumably hoping to be accepted in time as a divinity himself. However, after the world was tired of warfare and few of the nobles remained to resurrect old traditions of liberty, Augustus, made all-powerful by his victory at Actium, realized that he could take his time to work out an acceptable form, and that there was no need of offending the nobles. He then laid aside extraordinary honors and titles and, after some experimentation, decided to rule by means of the traditional magistracies,

using the proconsular office over the border provinces for the control of all the armies, and the tribunician power for the control of legislation. He could then safely permit the senate to continue as an administrative body in control of the government of pacified provinces which had no armies, and the republican magistrates could be elected as before to perform their duties within the circumscribed field now remaining. Nothing was defined regarding the succession, the question being left open in order not to offend those who still hoped that the theory of a republic was not wholly annihilated. But no one need have doubted that the man in whose hands Augustus should leave the proconsular command at his death would become his successor.

Mommsen has called this new government, designed in 23 B.C., a "diarchy," as though the world were divided under two associated and equally powerful heads; and Meyer, going even farther, has held that Augustus had in a real sense attempted to restore the republic—as in his *Res gestae* he claimed that he did. It requires a great effort of faith in forms and phrases to accept either theory in all seriousness. In 1927 there came to light several inscriptions from Cyrene, a small senatorial province, which show that in the years 7-4 B.C. Augustus not only freely gave advice to the senatorial governor of the province but that he reformed the local courts there. We have known, of course, that Augustus had the proconsular power in his own provinces and that he was also voted the *majus imperium* over the rest, but we had assumed that Augustus had avoided the exercise of this power except when invited to do so by the senate. It now appears that this *majus imperium* was exercised over the least significant senatorial province upon the slightest provocation. Augustus had in fact established a monarchy, distributing just enough offices and authority among the old organs of state to keep the senate content. And after a number of years (apparently about 12 B.C.) he again began to reveal aspirations for Caesarian autocracy. In the provinces assemblies were already holding festivals at which the deities "Roma" and "Augustus" were worshipped, and indeed temples were erected to them. In Italy there were to be no temples (though a few were erected), but the "Genius" of Augustus was to have a place with the public *Lares*, and the new cult was to be in the hands of a select group of freedmen in each city. Only after death, however, did Augustus expect the canonization, which Caesar had in-

vited while still alive, to take effect in Italy.

The imperial cult had some value as a contrivance for smoothing the way of government and eliciting devotion in the oriental provinces, where such things were customary, and among the freedman (ex-slave) classes in Italy, which were largely of oriental origin. It also had some influence in keeping the heterogeneous elements of the army loyal, since constant deference to portraits of emperors borne on standards was a daily reminder of the majesty of the person to whom the soldiers had sworn obedience. Among the old stock of Italy, however, the imperial cult never gained any real religious meaning. In the European provinces, from Greece to Gaul and Spain, it had just as little import. The occidentals went through the forms on stated occasions and raised honorific inscriptions as they were told to do, but in the home and in the private gatherings of the indigenous peoples the imperial cult never gained any real significance. The cult in fact seems to have been of dubious value west of the Aegean, and was doubtless imposed by some courtier who without due study had concluded that the mystical devotion observed in the imperial temples of Asia could be transplanted to the West. For two centuries the cult was generally confined to the "canonized" dead emperors, the *Dei*; in fact both Caligula and Domitian, who invited the title of *Deus* while living, met a violent death. Aurelian and Diocletian, who found the cult weakened in the army because of the civil wars that in quick succession had revealed the fragility of emperors, reorganized it among the troops by connecting it with the Mithraic religion, which was powerful among the eastern troops in the army. In this new cult the emperor called himself the representative on earth of the "Unconquered Sun," and himself a *deus*. Diocletian, who kept his capital in Asia, was the first who succeeded in ruling as a god. His successor Constantine, who recognized as legal the religion of his Christian subjects, could not consistently assume the titles of his predecessor though he did not refuse all the formalities. The later theory of rule "by grace divine" does not therefore descend directly from the Roman imperial institution, but was again invented to serve as a counterpart to the assumption of divine vicegerency by the popes.

VII. IMPERIAL ADMINISTRATION. The administrative machinery developed by the emperors differed much from the haphazard system of the republic in which consuls had

held office for only a year and could not, therefore, effectively supervise permanent governmental bureaus. Augustus, while feeling his way out to a more effective system, had at first employed the trusted servants of his own household as secretaries and treasurers of temporary departments of state. Since as proconsul he was excused by custom from rendering his accounts until he laid down his office, he in point of fact never did make a full statement for the *fiscus*, though he went far toward organizing it effectively. In the frontier provinces, where armies were needed, the emperor was proconsul. His place in the various provinces was held by his *legati*, chosen by him for indefinite terms from the senatorial class. These *legati* commanded the garrisons as well as administered the affairs of the province. Their judicial duties were not onerous, since the cities and districts enjoyed a large degree of autonomy and Roman law did not become operative until after Caracalla's edict. Needless to say, however, appeals to the governor became ever more frequent. The *legati* were usually chosen with care and held to strict account by the emperor and, as the tax gathering department was severed from the administrative, the temptation to abuse power was far less than before. Rome's provincial administration improved everywhere under this system, since the imperial appointees set a standard for the senatorial governors as well, and since the emperor occasionally exercised his *majus imperium* in calling to account any delinquent governor of a senatorial province.

The provincial tribute in the republic had usually been about a tenth of the crop, a single tax which was supposed to adjust itself over the cities since, when this tenth was shipped to Rome, the farmers could sell the rest of their surplus in the cities at a higher price. However, special poll and sales taxes were in time devised to catch the urban population. Much later, revenues from monopolies were introduced from Egypt. Julius Caesar had already gone far toward abolishing the tithe in kind because it entailed heavy costs in the collecting and invited dishonesty. Since he intended to do away with the annual change of magistracy at Rome, the time was ripe for the institution of direct tax collecting. The money saved to the state by the new system went to the taxpayer, for Caesar estimated the fixed tribute at about two-thirds the average value of the tithe.

The core of the army (over 100,000 men) was made up of citizen legions. These were sup-

ported by about an equal number of provincial auxiliaries who were given citizenship at the close of service. During the early empire conscription seldom had to be used. The pay was about the daily wage of laborers and, after twenty years of service, a grant of land or of money equivalent to about one-half the sum of the stipends earned. Army casualties were much reduced, since the imperial policy during the first two centuries was in general to protect the frontier and not to advance it. The principal legions were stationed on the Rhine, the Danube and on the Syrian frontier. After Vespasian's day recruiting for legions was seldom carried on in Italy. There were enough citizens and "Latins" in the provinces for the purpose, and the custom increased of enrolling suitable auxiliaries who were given citizenship when transferred to the legion. The army was perhaps the most important factor in the spread of Latin speech and of Roman customs.

Much has already been written about a putative imperial policy of Romanization and urbanization in the provinces. Direct evidence for this is very thin. It is, of course, a remarkable fact that in three centuries of Roman rule in Gaul, for instance, Celtic speech was almost entirely displaced by Latin whereas, fifteen hundred years after Roman rule, the one corner of France which later received an enclave of Celtic-speaking people still remains so largely Celtic in language. Nevertheless the evidence favors the old theory that the Roman government followed a policy of *laissez-faire* and seldom concerned itself as to whether or not the people in the provinces were adopting Roman speech and customs. In Africa, Spain and Gaul the stimulus seems to have come from the provincials themselves rather than from Rome; while in the East the native culture remained undisturbed. In Africa Rome's garrisons stopped seasonal nomadry in the interest of peace and security. As a result the nomads settled down to agriculture and, preferring to live in compact communities, they formed towns which invited trade and in time grew to the point where they could be granted municipal status. In Gaul the process was different. Here cities grew up near good harbors and at points where the army could conveniently receive supplies. But in the central part the Celtic tribal organizations long remained undisturbed. The Roman government did not concern itself with the nature of social organizations so long as the tribute was forthcoming. Normal economic processes gradually

divided the natives into large landholders (who invited Roman culture for social reasons) and renters. In Gaul the manorial villa with its group of dependents usually formed the nucleus of new cities. There were other ways in which Roman culture spread, but these instances will perhaps illustrate how without purposive pressure from Rome internal social and economic factors furthered the formation of Romanized municipalities.

VIII. ECONOMICS: IMPERIAL PERIOD.

The economic system did not alter much during the first two centuries of the empire. In the making of a few articles like pottery, glassware and bronzeware certain old industrial centers in Italy continued to produce large quantities for world wide distribution. Cloth weaving of wool, however, remained a domestic industry in Italy, and implements of iron and steel were usually put out by the individual smiths, though occasionally there was concentration of numerous smithies in one firm. In southern Gaul large factories sprang up for the making of glass and pottery, and Egyptian state factories, which had long made fine linens, continued to do so under Roman dominion. In a word, although capitalistic production was maintained, it did not make great strides under the *pax Romana*, despite its open ports, safe seas and extremely low tariffs. It is difficult to see why. To be sure, Roman law discouraged the formation of corporations of unlimited liability, but that law was not applied to foreigners. In Asia, Africa, Spain and Gaul non-Roman manufacturers had the right to form joint-stock companies to increase their production but they seem not to have done so. Capitalism was not kept down by heavy taxes or tariffs. There was no graduated income tax to frighten mounting dividends, and harbor dues ranged from two to five percent. Italy, of course, was devoted to agriculture and foreign investments in land, and never suggested the need of mercantilistic policies. The extension of the empire in fact opened the doors of Italy to foreign goods carried in foreign ships, and this was certainly one of the chief reasons why the larger Italian industries of the republic dwindled by the time of Marcus Aurelius. And those foreign goods were largely produced by slow free manual labor working in small units, as was the case with Anatolian rug weaving until recently. The world of trade, which had promised in the days of Augustus to create a new industrial era, settled back gradually to the old small-shop system to

which so many European cities still adhere. It was a harmless, congenial system which worked the artisan hard for small profits but left him a free individual; and it permitted the consumer to satisfy his own tastes without having to submit to the tyranny of standardized factory goods: the psychological explanation of it is not to be disregarded. The system, however, did not create much free capital to serve as a balance wheel at times of political crises, and during the empire sudden invasions always found the state lacking in economic resiliency.

With the establishment of the empire piracy came to an end, not indeed through any direct effort to police the seas, but because Augustus insisted on complete orderliness in the provinces, and it was in the misgoverned provinces that the pirates had fitted out their crews. Maritime commerce now increased. Ships were not large—indeed few harbors could have received large ships—and the emperors did not undertake to build harbors except at Ostia; but the Syrians, Alexandrians and Greeks in the East and the old Punic towns of Africa and Spain—especially Cadiz—shared in a very busy maritime trade. It was also about the time of Augustus that the periodicity of the monsoons south of Arabia became known, so that ships could sail from the Red Sea ports of Egypt to India and back by a route much shortened. A voyage from Rome to lower India and back was now considered quite feasible within a year, and it could be made wholly by water after Trajan connected the Nile and the Red Sea by canal. Indeed in the second century ships setting out from Egyptian harbors not infrequently visited the coasts of China. But since there was still no compass, shipping had to cease during the rainy season when the stars were usually hidden; and skirting the shores in order to keep directions entailed much danger of shipwreck.

Land routes were still popular with traders. And Rome was above all else an expert road builder. These roads were apparently never built primarily for commerce. They had been made straight and solid to carry the armies with their heavy baggage trains to and from the outer rim of garrisons. However, they had also been surveyed with a view to the speedy provisioning of the garrisons, so that they usually connected important cities. As a rule the government constructed the great thoroughfares and called upon the communities to build the connecting links which served for local intercommunication. Commerce, of course, quickly availed itself of

these open and safe arteries, and trading posts which grew into cities sprang up wherever they went.

In agriculture the drift toward large plantations continued in Italy except in the Apennines, where there were still many small holdings. Large farms often specialized in one chief product and depended upon the market for the clothing and implements needed. "Domestic economy" was not the rule. In Italy orchards, vineyards and ranches increased. In the neighborhood of Rome this was in part due to the fact that provincial grain came by way of tribute and was sold in the city below market price. In other parts of Italy it was in some measure due to the fact that the soil was weary of cereal raising and that the people had become accustomed to a more varied diet. With the rise in the price of slaves and a certain political objection to slavery—which we first notice in the legislation of the Gracchi and Caesar—the tenantry system was becoming increasingly usual on large estates. By Hadrian's day there were probably more tenants than slaves on Italian lands. On imperial estates, which had become very extensive through the brutal confiscations of Nero and Domitian—Septimius Severus later surpassed even Nero in expropriating property—the tenantry system was customary. On these estates an imperial contractor managed the plantation, supervised the tenants, collected and marketed the thirds which they paid as rental, and drew his own profits from the exploitation of a part of the estate which was worked without cost to him by the tenants.

Many of these renters were very humble people; in Italy not a small proportion were ex-slaves, set free and turned into tenants when it was noticed that compulsory labor on land was inefficient and expensive to watch. In the provinces many of the rudest and dullest of the natives were among the small renters. In the third century, during the fifty years of civil wars and invasions, the tenants suffered severely. Taxes rose and rents were increased to the highest possible point. Tenants then began to slink away from their holdings to such an extent that the emperor, in order to secure his returns from his own rentals as well as from the taxes on private land, issued an edict which ordered farm tenants to observe their contracts. When this did not suffice, another edict followed commanding the sons of tenants to take up the contracts of their parents. By this time the renters were already in such humble station that

they failed to rise in insurrection, and henceforth they were bound to the soil in quasi-serfdom. Of the exact process by which all this took place we have no record, but an edict of Constantine, dated 332 A.D., shows that the process was then nearly complete. Something of the same kind occurred simultaneously among the artisans when at a critical moment the state insisted upon the conscription of the labor guilds for government service. Then urban labor, as well as rural, had to accept a permanent status of bondage.

IX. SOCIETY: IMPERIAL PERIOD. Gibbon and Mommsen have pointed out that during the second century there was more general prosperity and happiness than the world had seen up to that time or was due to see again for many centuries. The number of slaves had diminished to such a point that the remainder were treated with much consideration. Even if stoicism and Christianity had as yet exerted little practical influence in teaching humanitarian doctrine (and neither went so far as to outlaw slavery), prudent considerations of self-interest advised the placing of slaves under the protection of the courts. With the decrease in slaves there was, before serfdom entered, an increase in the class of free shopkeepers, artisans and farm renters who, in view of the constant growth of the cities and the lavish expenditure of money, must have found life tolerable. Charitable institutions were so numerous that there need have been little suffering from want. There are many inscriptions that contain some record of foundations and trust funds devoted to the support of the poor, the building of schools, baths and theaters, and to the financing of public festivals. The state, too, was interested in such benefactions. Not to mention the "bread and circuses" provided to keep the poor of Rome in complacency, Nerva and Trajan also placed productive funds in the hands of committees throughout Italy to provide for the support of the children of the poor. This might be termed a motherhood pension, but since these funds were regularly invested in land mortgages the institution provided at the same time "rural credits" at a low rate. It has been estimated that the equivalent of about one hundred million dollars of state funds was thus placed.

Wealth was abundant in the second century and the rentier class enjoyed leisure in most of the cities of the empire, patronizing the arts, especially those that might contribute memorials to themselves. Pliny, who owned several exten-

sive estates, was a typical citizen of this period of prosperity. He held the usual offices of state, visited his properties, hunted, supervised and endowed charities, gave purses to impecunious writers, bought works of art, wrote salacious verses and moralizing letters and almost daily attended literary readings. An enormous amount of polite writing was done. If it were true that economic prosperity stimulates cultural production, that period should have created a dozen Shakespeares. In point of fact it created not a minute fraction of one. It filled gorgeous cities with busy, generous, contented epicures who were sure the millennium was just beyond the threshold. We now know that the thousand years which they inaugurated were the most dismal that history has recorded.

The student of sociology will find one of the greatest of mysteries in attempting to analyze this strange second century A.D., a period which displays a charming material façade over cultural futility. Art was floundering back and forth between baroque lavishness and academic exactness. In literature experimenters were trying the boldest effects in "new styles," while others were working on established models. In religion the new mystical cults gained many adherents, while the educated classes turned to every form of philosophy as a substitute. A kindly humanitarian stoicism had the favor of the court, but teachers of Epicureanism, of the Academy and of various forms of hedonism also had respectable audiences. There was diversity enough, and a widespread eagerness to find intellectual satisfaction, but no directing force, no definite cultural trend. It would seem that Rome, after pacifying the world and building the roads that connected east and west, north and south, was being overwhelmed by the confusion of faiths, creeds, temperaments and tastes that rolled back upon her. An absorbing fellow-sympathy and open-minded humanitarianism, neutralizing all initiative, seems to have been the only outcome of the all-pervading race mixture that was Rome. It may be that this might have proved to be a fermenting period for a new vital culture, had there been time for its emergence; we cannot say. It was at least futile in cultural accomplishment, and the government broke down before anything came out of it.

The only significant products of the periods were in the realm of jurisprudence. The rapid spread of citizenship, which culminated in the grant of universal citizenship by Caracalla, called for the adaptation of Roman law to diverse

peoples in all corners of the world. And the emperors called to their service the keenest minds of the age, men like Papinian, Ulpian and Paulus, to write "responses" in their names. These men labored in the spirit of the old republican jurists, endeavoring always to find a logical basis in "natural law" for individual decisions, and they were the more eager to do so because they were deeply versed in stoic thought and also knew the needs of the new peoples who had grown up under non-Roman custom. When long afterwards Justinian ordered the codification of all law, his jurists fortunately went back to these *responsa* as the soundest body of juristic thought. The result was that his *Digest*, which became the foremost textbook of later European jurists, disregarded many of the aberrations of the fourth and fifth centuries, which had made a different law for *honestiores* and *humiliores* and which had accepted the word of the monarch as absolute. The *Digest* reverted to the earlier theory that the prince's power was derived from the people, that all free men were equal before the law and that law was the science of justice. It thus became one of the most powerful factors making for modern liberalism.

X. ROME'S LEGACY IN THE FIELD OF THE SOCIAL SCIENCES. In the social field Rome's thinking was generally reflected in practice rather than in philosophic discussion. Where patriarchal tradition is strong and where the organs of government are completely occupied with the administration of a world wide empire, one does not expect the government to take up the burden of social amelioration. Paternalism appeared far less frequently at Rome than in Greece, and is seldom to be found except in the empire. Caesar, eager to save the old stock of Italy, had attempted to enforce the employment of free labor on the farms and to colonize the urban freedmen in the provinces. Augustus, when he found that the family institutions were disintegrating and that "race suicide" seemed imminent, made some very drastic experiments in legislation, limiting the freedom of divorce, taxing celibacy and childlessness and giving rewards to families of three children. Then, fearing the consequences of race mixture, he placed a moderate limit upon the manumission of slaves. Now and then the socialistic theory had cropped out that the state must provide a living for indigent citizens, a theory which probably arose because the re-

public for a long time had had an abundance of public land available for anyone who was in need of a livelihood. The Gracchi had so far accepted the theory as to institute regular doles of wheat in the city for the poor citizens who could not be given land, and this became a regular institution. Nerva and Trajan went much farther, in that they created a large state foundation, mentioned above, which was at once a motherhood pension and a provision for rural credits.

However, it was especially in institutions of gradual native growth that Rome's social experiments reveal situations deserving of careful observation. The remarkable political aristocracy that survived for hundreds of years, based primarily upon unpaid distinguished civil service, stands out as one of the most striking phenomena of Roman society. To be sure, ancestry as an important consideration in defining the group and property qualifications were not disregarded, but in every case personal capacity in public office was the determining factor. This aristocracy, though it grew selfish and overbearing at the end, performed without remuneration very remarkable services at times of great stress. No less peculiar to Rome was the high position accorded the matron in the family. The family, tied together merely by a contract that could be severed by consent or by either member for good cause, nevertheless remained effective up to the time of the civil wars, resting as it could upon mutual respect. Not until ecclesiastical authority became dominant in the government of decaying Rome was the matron compelled to accept a different code of conduct with respect to divorce. Useful also for study is Rome's remarkable experiment in race mixing. Because of the heavy importation of cheap labor over the slave-block, which crowded free labor to the provinces, and because of the ease with which slaves entered citizenship through manumission, the population of Italy was largely transformed racially between 200 B.C. and 200 A.D. We do not yet know what this unparalleled displacement of a native stock had to do with the change of spirit that took place in the dominant state. Perhaps we shall never know; but the fact must not be lost sight of in a consideration of Rome's social experiments. There are those who consider it a very important factor in Rome's decline.

In the field of economics Rome produced no important writers. Yet the civil code bears the marks of sound economic thinking, especially in its respect for the rights of private property, its progressive handling of contracts and its de-

finition of partnerships and associations. For despite a certain distrust of corporations of limited liability, the Romans developed for civil purposes an adequate corporation law. Indirectly it was a gain for commercial law and precedent that the state which ruled the Mediterranean was so little concerned with the commercial success of its own citizens that—unlike Carthage—it could advocate open ports and the freedom of the seas. The examples of Rome's behavior that Grotius was able to draw from Livy made an impressive argument against *mare clausum*. As a striking example of national interference in economic laws, one may refer to the later imperial "conscription" of labor guilds and farm labor which led to the colonate of Constantine's day. On the other hand, the theory that slavery releases energy for cultural advancement—once advocated vigorously in our South, and not wholly dead—does not occur in Roman writers, though it is supposed to draw support from Roman example. The institution of slavery as found in Rome deserves very deep study from the economic side, for nowhere else can it be observed in its most natural aspects. On this subject R. H. Barrow's recent study, *Slavery in the Roman Empire* may be consulted.

Of Rome's contributions to the art of government the books of the eighteenth century—when modern political theories were taking shape—are the best witness. Rome provided several examples of governmental forms. The successes and failures of aristocratic administration and of pure democracy—a democracy somewhat saner in its behavior than that of Athens—could be studied in Livy and Polybius. The efficiency of the liberal monarchy of Augustus and the oppressive bureaucracy of Diocletian's absolutism are well described in the imperial writers. The outstanding accomplishments of the middle republican period have been among the most significant contributing factors to the building of modern states. Here we refer especially to the demonstration that liberalism in the administration of a large federation enabled an orderly democracy to win extensive cooperation from its neighbors. No less remarkable was the spirit of compromise—the willingness to "play the game"—that at Rome won a long series of class reforms without bloodshed. It was this capacity to see the other man's point of view, to yield by adaptation before striking, that finally created the constitution of "checks and balances" which evoked the enthusiasm of Polybius. Again, the record of a society submitting to the severest

discipline for the common good, a discipline that brought into being the Roman legion, that insisted upon durable roads, aqueducts and public buildings, and that took its share in the exacting civil service of Trajan's day—this record constitutes one of Rome's most lasting contributions to civilization.

The effects of Rome's territorial expansion were diverse. It was not wholly beneficial that one state should have become the carrier of a world's culture. The cultural rivalry that has arisen from a segmented Europe has been fruitful, just as it was productive of thought that Athens and Sparta worked upon separate theories of state and with differing ideals. World unity under Rome was in danger of creating stagnant uniformity, and there was also the danger that when the one cultural state fell, all culture would go under. The fact that the western provinces assimilated so quickly all that Rome could give is a demonstration of what value lay in unity. But against this must be matched the fact that this very centralization seems to have stifled rather than stimulated the frail and dying culture of Greece. As an illustration of the value of imperial unity, one may perhaps point to the rapid spread of Christianity. Taken simply as a cultural phenomenon it is difficult to see how a religion springing up in a nook of Asia could have spread over the civilized world in three centuries but for the fusion and confusion of peoples that Rome's imperialism had brought about.

In the domain of jurisprudence the early Romans did not indeed produce penetrating analysis, yet by combining a temperamental respect for law and order with an incomparable accumulation of experience in government which they patiently studied, they were able to evolve a practical code of universal applicability that more than matched the abstract constructions of the Greek thinkers. A prudently liberal self-interest, applied in the government of subjects as well as in participation in a world wide commerce, led them to respect the "customs of nations" and thence to infer the universality of a sense of justice before ever they learned that stoic philosophers had invented such ideas. They even preceded the metaphysical Greeks in creating such abstractions as juridical persons and corporations because their rapidly expanding state could not operate with the ideas of the single-cell *polis*. And conceptions created in order to facilitate intercourse with their municipalities were readily extended to other quasi-public

and to private bodies until corporation law was soundly based. Reading their experiences logically the Romans also conceived of the individual as a legal personality in his contacts with the state, and consequently assumed that the state conferred rights upon the citizen which must be protected by law even against the encroachment of the state. This is only one illustration of how the practical-minded Roman, averse to metaphysics, would nevertheless pursue an abstract idea to a very remote corner when experience compelled him to think. It was this practise of driving to the logical core of legal concepts that enabled the jurists to shape an enduring code. The permanence of their work is apparent when we consider that "most of the basic principles of the Anglo-American law of Admiralty, Wills, Successions, Obligations, Contracts, Easements, Liens, Mortgages, Adverse Possession, Corporations, Judgments, and Evidence come from the survival or revival of Roman law in English law. The fundamental conceptions of Habeas Corpus and Trial by Jury as well as many principles of the law of Torts are of Roman origin" (Sherman, C. P., *Roman Law in the Modern World*, 3 vols., Boston 1917, vol. i, p. 387).

Finally, though Rome's supremacy temporarily removed the possibility of what we optimistically call international law, her contributions to its code have been considerable. Until the civil wars shattered respect for custom, Rome observed strict rules of international dealings. It may be that the early fetial rules won a moral aspect only because morality was profitable to a people who had to be on the defensive. Nevertheless the spirit of the fetial law lived on in the customary rules of what was permissible behavior between nations in war and peace, a set of customs which was also called *jus gentium*. It is frequently said that those rules had not the force of a contract. But the fact is that they had a greater force than a contract that is broken as soon as a treaty is annulled. By a very old belief

Jove was the guardian of those rules, and whether or not the consul believed in Jove, he did not dare to permit his army to believe him accursed. Added to this was the fact that statesmen laboring in their offices for the state were still considered to be bound by the same moral code as when acting as individuals. The Hegelian theory of a state that is superior to the moral obligations which bind individuals may have been implicit in fragments of the code, but it was not made explicit and never was accepted as justification for international misbehavior. Accordingly it was possible for Grotius to connect the *exempla* from Livy with the sentences of the *Digest* and draw up a proposed code of international practise still superior in some respects to modern usage.

TENNEY FRANK

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IV

The Universal Church

I. The Middle Ages may be considered, for our purpose, as starting with the reign of Theodosius (379-95) who, after a line of rather hesitating and ineffectual emperors, took charge of the undivided empire. The importance of his reign can be gauged from the fact that a year before his death he established Christianity as the religion of Rome and that he forbade any government official in the future to hold the pagan religion. The importance of this act can be better understood when it is remembered that the Christianity he "established" was that form of it which accepted the orthodox faith as determined by the popes. Some of the earlier emperors had supported Arianism. Theodosius proclaimed the Catholic faith in 380, declaring it to be the law of the empire that all his subjects should hold "that religion which the divine Peter gave to the Romans and which it is clear Pope Damasus follows and Peter, Bishop of Alexandria, a man of apostolic holiness." We can fairly look on the public and political triumph of the papacy as the dominant historical fact in that age. Through its rise and consolidation the failure of the Roman Empire lost much of its danger to western civilization. There grew up in place of that empire a central power around which could be grouped the fortunes of the new political organization that emerged out of Christendom.

The disintegration of the Roman Empire was inevitable—"the inevitable decay of immoderate greatness." The specific causes to which it was attributable have been the subject of a good deal of speculation; but in several directions there seems to be something of a consensus. Rome's dominions had expanded too widely for them to be defended except with an immense army; and though the organized armies of most of the provinces were undoubtedly valuable from a military point of view, the East, where most of the trouble was to be met, never did its fair share in furnishing recruits to the Roman arms. The eastern provinces, while accepting the imperial ideal, would never fight for it. On the other hand the Roman administrative system

could not be easily imposed on the western provinces. In Gaul, for instance, the Roman municipal system never took root; the tribal system in existence there, ancient, customary and vigorous, would not accept the restrictions imposed on it. Therefore, while Gaul provided the most numerous military recruits for Rome and the most successful in war, it was always the center of revolts and disturbance.

The economic basis of Italy was being undermined by transformations in the agrarian order. The conquest of the great grain districts of the world had made wheat imported into Italy so cheap that Italian small holdings had languished and finally had given way to enormous grazing farms with the usual sequel of unemployment. The price of slaves went up so high that they could not be used economically on the latifundia. The small landholders were therefore no longer dispossessed, but remained as servants of the overlord who had purchased them. In this way a new class came into existence, a servile population locally employed, attached to a farm, dependent on a superior lord, and falling into a customary service for which it received in return food and a home. But although these farmers stayed on and were now in subjection, they had no longer the same interest as before in the land they cultivated. The land itself became exhausted through the lazy ignorance of the worker and his failure to continue that orderly rotation of the crops and general art of agriculture which figured so charmingly in the "Virgilian litanies." Italy itself came to be on the edge of starvation.

At the very time when the country was poor the bureaucracy was extravagant in both size and spending. Moreover the old landlord class had largely failed with the collapse of agriculture at home, and its place was taken by a new, wealthy industrial class that did not trouble itself with local responsibilities, refused to continue the unpaid public service formerly ungrudgingly performed by the aristocracy, and thus drove the municipalities into either debt or increase of taxation in order to support the social services which up to this time had been

carried on without any expense to the public.

Under the financial difficulties and burdens thus beginning to weigh heavily on the ordinary populace, and still more under the unsound economic measures (debasement of currency, etc.) passed by the later emperors to remedy the ills, the restless population began to wander from their districts in search of surer and less oppressed conditions. Laws were therefore passed forbidding first the imperial tenants and later any tenants to leave their holdings, and also forbidding the guildsmen to leave their guilds. The enfeeblement of the empire was becoming obvious to all who lived in it.

Then came the series of invasions. At the outset Theodosius rendered service to Rome by inaugurating the new principle of settling the barbarians in the empire, but the failure of his successors to follow this policy was among the complex set of causes which led finally to the disruption of the empire.

II. The stage of western Europe was left to the papacy, which, together with the empire and Mohammedan power, shaped the course of historical evolution in the Middle Ages. The emergence of the papacy was most clearly seen in the life and work of St. Gregory I (590-604), surnamed the Great, who was forced to deal with the Lombard invaders as though he were a sovereign and indeed as though he represented the old power of Rome. His tribune protected the inhabitants of Naples from tyranny, his commanders defended Sardinia, and his ships carried from Sicily the grain needed by the Romans. Moreover his domestic policy favored the old established *coloni*, so that he was able in some degree to restore Italian agricultural prosperity. His short reign of fourteen years is typical of that public and political guidance given by the early popes to the West which saved it from ruin. Still another sign of their width of vision can be seen in the more spiritual side of the pontifical policy, namely in the vigorous effort to convert those newer nations which had never known the Roman discipline and were destroying the old Roman order. The British bishops who refused to attempt to convert the Saxons represented in their views a considerable body of Christians who looked on the faith as only coterminous with the empire and who therefore refused to regard as worthy of faith those who had brought destruction on the empire. It was against such an attitude that, two centuries earlier, St.

Augustine had written his *City of God*, of which one thesis, at least, was the right of the new nations to the inheritance of Christ.

The conversion of the Anglo-Saxons by the other St. Augustine (597) and finally by the Irish monks, and of the other newborn nations, inevitably added to the public greatness of the papacy. These newer peoples cared nothing for the eastern emperor nor for his exarch at Ravenna; for them the outstanding figure in Europe was the pope. It was the pope whom they traveled to Rome to see, and it was around the tomb of "the divine apostle Peter" that their own tombs were laid.

Even the literature of Rome, which retreated to Ireland during the invasions of the continent and of Britain and which returned again to the continent through England at the time of the renaissance under Charlemagne, represented no longer the language of old republican or imperial Rome but a new language. It had lost its old technique and some of its older grammar and syntax, but it had become more flexible and more vivid. It was now fit to inaugurate the *dolce stil nuovo* of the Middle Ages.

The Mohammedan influence began after the Hegira (622) when Mohammed fled from the pagans who were roused to fury by his preaching, only to return to Mecca in triumph eight years later. Surrounded only by disunited and disorganized peoples, the new religion found success easy enough; it went out to its apostolate with a sword in its hand. By the eighth century Christendom was ringed by a steadily advancing circle of Arab Mohammedan states—Syria (conquered in 634), Palestine (637), Egypt (640), North Africa (695) and Spain (711). Even here Mohammedanism did not seem to have found the limits of its domain, for though it was crushed in 732 under the walls of Tours by Charles Martel, its armies remained encamped on some of the southern districts of France (whence were later to come the heresies of the Albigensians) until Charlemagne drove them out nearly three-quarters of a century later. One effect of this circle of enemies was to keep Christendom together under the menace of invasion.

There were troubles, however, within Christendom. In all the West, besides the papacy and the distant islands, there were only two important secular powers—the Lombards and the Franks. These were both Catholic peoples, but with both the papacy continued an intermittent strife. By the eighth century the

greater part of Italy was thoroughly under Lombard domination, and the greater part of old Gaul was under the rule of one or another branch of the Franks. The Burgundians were a lesser people farther south who were later to emerge into prominence with apparent capabilities for achieving real nationhood.

Meanwhile under the old name of Rome an entirely new empire had been organized on the shores of the Bosphorus. When Constantine the Great had transferred thither the central authority of the empire (330) his object had been to establish government where it was most needed, within striking distance of the weaker frontiers, the Danube and the Euphrates. It was here that the undisciplined hordes of the outer paganism were most likely to attempt to break in. The new seat of government was to be a bastion on the defensive wall against the troubled East. While Constantinople always remained imperial, it ceased gradually to carry the old Roman character and became slowly impregnated by Greek ideas. More swiftly than Rome itself it became wholly Christian. By its complete intermingling of elements, Roman, Greek and Christian, the eastern portion of the empire continued, in a character entirely its own, the work of old Rome. This it did largely through its inheritance, first, of centralized government and of jurisprudence and, second, of the function of defending the common culture against an outer world. Of course, to the end, in the mind of the Byzantines and of the westerners themselves for a very long time, the empire was never a divided one, even when two emperors ruled separately over East and West. This division was part of the old scheme of Diocletian, intended to be merely an administrative division and not to imply a political separation of independent powers. In point of fact, however, the two parts of the empire were forced off from each other by the inability of the East to show any effective power in the West except spasmodically. Justinian (527-65), almost alone among the emperors, managed to make his power felt in the West.

The germs of both the weakness and the strength of the eastern empire were contained in its imperial inheritance of centralized autocracy. Thus in Byzantium a strong emperor was able to effect union, while a weak and incompetent emperor could do nothing at all. The lack of feudalism or some such wide-flung decentralized organization made it impossible for the emperor to gather a baronial council to his aid

and still less a legislative body or a band of advisers. In this way the nobles, shut off from constitutional methods of protest or advice, had no other way of meeting imperial oppression than to submit or rebel. The result was that the imperial line had an unhappy record of revolt, mutilation and murder. Yet the old bureaucratic system inherited from the Caesars alone held together the Byzantine Empire; it was enlightened, industrious and orderly. Although under a weak emperor little was ever effected, within or without, the empire continued as a whole to be perfectly stable and tenacious throughout all this period. Even at the end of the period when the Normans (1096) and the Venetians (1203) attacked it and were able to tear off provinces from it, setting up within its old borders princedoms of their own, the administrative success of the bureaucracy prevented any internal weakness from destroying it as would certainly have happened under similar circumstances in any corresponding state of the West.

The particular importance of Constantinople in our study is the importance of an alien example over against the adventurous West. With their inexperience and restless constitution making, the feudal states of Europe recognized the success of the long-lived autocracy and even tyranny of the eastern emperors. Always by their side was the spectacle of a political organization continuing to exist without having the support of much greatness or success other than hereditary greatness, the accumulated and stored wisdom of the past and the persistence of an efficient civil service. Moreover the personal government of the emperor included a sway over the church which, while it shocked the crusaders, at least gave new ideas to a Barbarossa or a Frederick II. Not merely did Frederick II have his Arab friends to point out to him the greater political power of a sultan who was also a caliph, but he had as well the rumor from the East which told him of a Christian sovereign who was also the supreme head of his church.

Apart from their interference with the creeds, the emperors undoubtedly provoked among the later national kings in the West an admiration for their system of government. French and English sovereigns cited the emperor by name as their particular ideal. His government was orderly and stable; they envied him his venerable power (*cf. Orient et occident* by Jean Eversolt, Paris 1928). We see

that influence reaching France through trade, through a desire to possess the rich relics of the saints to be found in the East and of course, later, through the crusades. But even before the crusades the prestige of Byzantium in the sixth century, the rise of the Mohammedan armies in the seventh, the modifications in Islamism in the eighth and the routes to the Sepulcher in the tenth and eleventh centuries kept the connection between East and West real and intimate, and enabled some knowledge, not wholly apocryphal, of the eastern empire to reach and inspire the kingdoms of the West. The naïve accounts of their visit left by the crusaders and the comments of Anna Comnena prove the influence of Byzantium on western political and social utopias.

A weakness of the eastern emperors was their inability to make use of the popes. On the whole, the papacy was for centuries true to its political allegiance to the East and remained true even when the Lombard had overthrown in Italy the representative of Byzantium and, boasting himself a loyal Catholic, claimed to be independent of the semi-schismatic East. The emperors themselves forced the popes from their submission and by their poor statesmanship drove into opposition the only power of the West that had any inclination to accept their sovereignty. In 751 the Lombards destroyed the exarchate, in 754 the Franks marched on the Lombard capital of Pavia, and in 757 the pope received the Donation of Pepin, leader of the conquering Franks. From that moment the temporal dominion of the popes was a public fact, recognized publicly and publicly proclaimed.

Within a generation of this act the popes had replied to the Donation of Pepin by transferring to Pepin's son Charles the empire of the West. As Charles knelt on Christmas Day in the year 800 at the shrine of St. Peter in Rome, the pope (Leo III) came over to him, placed on his shoulders the purple robe of empire and on his head a golden crown. Thus came back to the West a Caesar, this time appointed by the pope although acclaimed by the people. Not that anyone then thought of the pope as the political master of the emperor; the pope himself had been protected by the emperor and reinstated by him, and indeed on Charlemagne's election the pope, in token of his own political submission, had sent him the keys of the tomb of St. Peter and the banner of the city. Yet the fact remained embedded in the memory of

Christendom. The successor of Peter had transferred to the Franks the empire of the Caesars. The relationship of these two powers was to cause trouble enough later, but Charlemagne in his greetings to the pope after his election in 795 had already expressed his view of their relationship: "It is ours externally to defend the church and internally to fortify it by acknowledging the Catholic faith; it is yours to pray for the victory of Christendom and the magnifying of the name of Christ." But the problem could not be posed so easily as that. Under the Carolingians, however, the difficulties were few, largely because the successors of Charlemagne were never great enough in actual power to come in conflict with the papacy.

When, however, Pope John XII transferred the empire from the feeble descendants of Charles to the new Saxon dynasty, crowning Otto I in Rome on January 31, 962, the way was open for a quarrel, for there were many new features in this later Europe that made spiritual and temporal loyalties sometimes difficult to adjust. The German princes, for instance, used the church to extend their German dominions ever eastward and to find princely benefices for their younger sons. Thereby the new feudalism forced these prelates into a double subjection: as prelates they were under the jurisdiction and appointment of the See of Rome, as barons under the jurisdiction and appointment of the emperor. These conflicting claims soon involved a breach of the peace. Both sides had reason in their quarrel. Thus Gregory VII stated boldly, "The pope is master of the emperors"; thus Alexander III, in view of the facts, not unreasonably asked, "From whom does the emperor hold the empire if not from the pope?"; while Innocent III answered the question with complete assurance: "It was the apostolic See that transferred the empire from the East to the West, ultimately because the same See confers the imperial crown." These statements of course were true; the popes had certainly proclaimed, anointed and crowned this later empire, since there seemed to be no other power that could do it. The popes were thus recognized as the public voice of Christendom with its responsibilities and its greatness. Adrian IV, the Englishman, declared that he loved the tiara "because it burnt like fire." Yet there was no tradition in Christendom that the pope was a temporal sovereign except over definite territories and then only by the grant of an emperor, as in the case of the fabled Donation of

Constantine or the more real but no less mysterious Donations of Pepin and Charlemagne. Between these two sets of facts it was difficult to find a solution of the problem. Each of these two supreme, though differing, powers had often requested confirmation by the other. There seemed an age-long custom that neither was to be recognized until the other had approved. Hence the conflicts between them were violent and significant, arising over such questions as investiture, the alleged right of the papacy to recognize and authenticate temporal sovereigns, the alleged right of the emperors to nominate the popes, the power of the crown over criminous clerks and, a little later than our period, the right of the crown to tax the clergy. But the source of most of these later disputes was the system of feudalism that was now rebuilding the world.

III. Feudalism is a system that is to be found everywhere as a stage in social development, though the exact form it takes will differ with the variety of local custom and even local religion. It was based on the principle of commendation by which one man took charge of another or put himself into another's charge. From the point of view of its duties it was a contractual system whereby the nation, represented by the king, let out its lands to individuals who paid rent by doing military service and civil suit; and as regards its rights it was a land system whereby, in Stubbs' phrase, "every lord judged, taxed, and commanded the class next below him."

Supplying a cohesive force when none other was possible, this system further introduced a wide sense of legality where everything was settled by custom and law and little was left to choice. Moreover it provided an armed force of provincial and even national usefulness which saved Christendom from invasions from both East and West. It solved for a time two of man's perpetual problems—his social organization and his land system. But it demanded a heavy price for these advantages, for under this system the central government lost touch with the lesser people and directly commanded only its highest vassals. On this account the cohesive force often proved useless. The independence and local sovereignty which the feudal system accepted encouraged civil war, and it was a matter of mere chance whether a rebellious baron might not have as many followers to his immediate call as had the king himself.

France and Germany were glaring instances of this. The entanglement of the church in the system prevented it from acting as a restraining force, and the perpetual dynastic controversies swept the bishops and clergy into one side or another, and soon degraded excommunication by making it not the least effective of the instruments of war between baron and baron, or king and king.

Besides feudalism, however, there was another world wide system that bound Christendom together—the institution of monasticism, which was gradually becoming a more tightly knit organization. At first St. Benedict and the Irish monks were its two chief representatives; to them more than to any other power, except perhaps the papacy, was due the recovery of the culture of the West, for it was in the monasteries, on their hills or in their remote deserts, that the tools of civilization—art and books—were to be found. In addition there was the great sprawling canonical organization, in which each house was even more independent than those of the Benedictines and accepted the vague and indeterminate rule of St. Augustine together with some local constitutions usually drawn up by the ordinary of the diocese. These canons regular and monks of various kinds were contemporaneous from the fifth century onwards and between them formed the chief centers of Christian piety and intelligence. They represented different ways of Christian life, being unlike in their ideals; while the canon was essentially a cleric and even a priest, the monk was not necessarily a cleric and at first was very seldom a priest. Indeed St. Benedict in his rule obviously looked on the priest as an unusual feature of the monastery. Hence it happened that while the monks preserved the older learning and were artists, architects, writers of chronicles and commentators on Scripture, the canons were the pioneers of theology. St. Augustine (430), their first promoter, was the great theologian of the church and his followers continued his work of illumination and thought. To St. Benedict we owe the culture of the West, to St. Augustine its philosophy and "divine sciences." Thus curiously it will be found that both Paris University and Oxford University began with a group of Augustinian canons and that the Lateran Basilica, too, had its theological school formed in the same way. Even the hospitals of the Middle Ages were chiefly Augustinian, including the famous ones at Smithfield and Bruges.

and high up on the Pass of Great St. Bernard.

More, however, than the earlier form, it was the later developments of monasticism, Cluny and Clairvaux, that actually welded Europe into one. The earlier form, as St. Benedict saw it, was a series of independent abbeys, held together only by community of spirit, ancestral leadership and a rule. But these newer forms, born in an age of organization, were consolidated into a unity of government and visitation. They were new also in that they aimed chiefly at an intellectual ideal; the monks were now to be scholars, and the older ideal of mere monasticism gave way before the intellectual vigor of the time. This very eagerness, however, proved in the end their undoing. The monasteries were crowded, but not all could satisfy themselves with books or learning. For the rest new liturgical offices had to be created to keep them occupied. Thus the tenth and eleventh centuries are the period when the most elaborate Catholic ceremonies and a multiplication of votive offices were introduced. Religious zeal thus turned into formalism and in the end declined.

The earliest of these new monasteries was Cluny which, establishing its system under the name of "the customs of Cluny" (910), was a congregation of abbeys joined under discipline and placed under the power of the abbot of Cluny to correct and amend. Its most famous abbot was Peter the Venerable (1156), the friend of Abélard. Also to the same Burgundian province where Cluny was, came Bernard of Cîteaux (1153), the great leader of another organized form of Benedictine monasticism. Its "charter of charity" laid down the principles that were to govern it, and among these were poverty in life and worship, remoteness of site, agricultural work (i.e. not the clerical sciences), coordination of all the monasteries under Cîteaux, and then annual visitation of all of them by the abbot of Cîteaux, himself to be subject to correction by the abbots of the four oldest daughter abbeys.

The movement undoubtedly gathered most of its first fervor and importance from the leadership of St. Bernard. Although he was preacher, mystic, saint and scriptural commentator, he came nevertheless, as perhaps no other saint had come since Gregory and before him Augustine, as the public champion of Christian ideals in every form—in politics, in philosophy, in agriculture, in art, in war. He was not great in all these ways, to be sure, but he insisted on the need for Christendom to

remember that its only justification in such worldly activities lay in its devotion to the faith. An age eagerly waking to the stirrings of the spirit in man was swiftly reaching out in every direction for things new and wonderful, in art and thought and political thinking. St. Bernard stood for these ideals, too, but only as inseparably united to Christ. Although, as we read his works, he seems to us sometimes to have misunderstood his age—the philosophy of Abélard, the royal dreams of Henry II, the rich effulgence of the early artists—nevertheless he did point to the danger of these pursuits and their disruptive tendency unless pursued in harmony with the general ideals which their promoters professed to serve.

While monasticism thus helped to unite Christendom, a contributing force equally characteristic of its age and in its way no less effective, was the adventure of the crusades. The geographical results of the first three crusades were of little permanence or importance. However, the crusade effected the holding off of Islam and the coalition of all Christian princes in a sense of common brotherhood. These adventures also served to introduce into the West elements of eastern and Greek art and literature. Not the least of their effects was the undying memory of a great spiritual romance which survived out of all the failure and distress of the campaigns, and gave a common note of splendor, width of vision and faith to the poets of the time.

While many influences were working to make the unity of Christendom apparent, the vigor of heresy was no less evident, so that for the first time men began to be afraid lest this unity should be broken. The last Christological dispute was settled when Monotheletism was repudiated by the church (Council of Constantinople, 680). The next great point was the discussion of Berengarius on the doctrine of the Real Presence, culminating in the definition of transubstantiation as the orthodox statement of the mystery. Berengarius (1088) denied the Real Presence of Christ in the Eucharist, because his particular philosophy denied the possibility of any separation between form and substance. Lanfranc (1089), whom Berengarius had hoped to have as his ally, was his most vehement opponent. The dispute turned on a philosophical question. It was not a point that in itself ever roused or interested the common people. Such purely abstract discussions, except where it was felt that they

might somehow weaken popular devotion, were left to the emergent scholasticism as topics for dispute. The attacks of Peter Abélard (1142) on his old masters also roused only academic opposition. It was not mere freedom of discussion that he demanded. Mediaeval scholasticism had this in plenty. Nor was he a freethinker: "The rock on which I have founded my conscience is that on which Christ has built His church." His point was a much more subtle one, namely that philosophy might be able to deny what theology had taught. He wished to divorce altogether Christ and reason, faith and science, and believe what his own logic could prove to be untrue.

The other great center of disputation was the violent group of eastern religions that grew up where the Saracens had settled in the wide rich plains of the Touloussain. There the whole position began with a principle in violent conflict with the doctrine of the incarnation, namely that matter and therefore all material things are essentially evil. It was not even Mohammedan but Zoroastrian. It was the old gnosticism that had first captured and then repelled the imagination of St. Augustine, a permanent frame of thought that has haunted even the idealist followers of Christ. The heresy of the Touloussain became the focus of other points of dispute. The princes whose names were involved in the common condemnation of the heresy were always anxious to deny that they subscribed to it, and their opposition to the crusade against the heretics was due probably to the fear that their own political independence would be threatened by the papal army. Pope Innocent III (1216) alternately coaxed and denounced Count Raymond of Toulouse, while Count Raymond alternately denounced and coaxed the heretics. But Christendom was chiefly struck by this heresy because it was the first since Arianism that really threatened to involve the West in any serious loss to common Christendom. Furthermore it was not amenable to apostolic preaching, even by St. Bernard, and it was growing wealthy. The sudden fear thus engendered began the new era of the inquisition. Force is nearly always the result of fear. The use of suppression was new because the fear was new. From that time on, the menace of this heresy hung threateningly over the Christian world, and the idealist writing thereafter regards the apparently solid unity of Christendom as being once more in danger.

IV. The system of education had badly lapsed during the long era of the invasions except in the western refuge of Ireland where the apostolate of St. Patrick (464) had prepared a way for the only Roman conquest Ireland was ever to know—its conquest by the Roman faith. Here monasticism found in the impulsive and aloof spirit of the Celt a rich soil for its development, severe, vehement, artistic and missionary. Almost at once it became the refuge of western culture. Classic literature, which Augustine had studied and Jerome had feared, became in the end the possession of the Celt. He grappled with the inheritance as he received it, and restored it to the West a new instrument for a new purpose. By the time the empire had begun to fail, conversational Latin must have been very different from the golden literature of the Augustan age or even the brilliant paradoxes of Tacitus. In the next generation the language must again have declined, if we are to take as a fair example of it Jordanes the Goth (551), the chronicler, with his cumbersome solecisms, which yet manage to make his story live. Between his style and that of Boethius (524) or Cassiodorus (575) there is a great gap. It is Cassiodorus, the founder of the trivium and quadrivium, who was the master of mediaeval education, and he brought to his task a learned, overornamented and not very satisfactory Latin. Yet at the end of our period, by careful use and especially by austere thinking, a language had been formed out of Latin suited to express clearly the abstract notions of philosophy. Latin had always been rhetorical rather than philosophical. Now its rhetoric was replaced by a frugal diction expressive of sustained and logical argument.

Apart from philosophy, mediaeval education included exercises in "rhetoric." This was one of the subjects included in the trivium; it involved a certain acquaintance not only with such classic authors as Virgil, Horace and Ovid, and with post-classic writers like Seneca, but also with the whole field of patristic study, especially St. Augustine. How beautiful the mediaeval use of words could be, how much like Tacitus set to music, is evidenced by the liturgical prayers and some of the more exquisite hymns. Beyond these sweet and woven sentences packed with sense and fragrant with hints of Gospel and classic intertwined, such as the *Media vita* from St. Gall or the *Laetabundus* of Sedulius, there came the first hints of our modern languages. In the northern sagas, the



song of Caedmon and the Arthurian cycle we have the early stirrings of poetic muse; after them came unrivaled pieces of fairy beauty like *Aucassin et Nicolette*, or trumpeting battle songs like the *Song of Roland*, or the later sagas and the *Anglo-Saxon Chronicle*. There is also a Celtic literature of Ireland, Wales and Brittany, touched with sadness, brooding usually over the sea and the sea birds, or speaking with Greek delicacy of nature's beauty and the lift and fall of the passing seasons. All these hint at what we know already—that popular education was gradually climbing up under the inspiration of the monks and the growing schools of grammar and logic. Just how learned or unlearned were the people we shall perhaps never know; it cannot well be maintained that the age which planned and built and lived under the shadow of Chartres Cathedral was really brutalized and ignorant. Printing has completely altered and falsified our standard of education; we imply by the word illiterate that those who cannot read or write lack education. But that is only because we now limit education to a knowledge of facts, instead of seeing as its purpose the production of good taste. Taken at his best the dweller in the Dark Ages and in the early Middle Ages was above all a man of taste. Not even the thirteenth century can rival the twelfth in taste, although it surpassed it in dexterity and skill; the tenth and eleventh centuries show the spirit of man climbing up to the heights he has often reached before and after, but perhaps with a depth and richness and sound fancy that have never been eclipsed.

In the realm of thought, although we find much coarseness and truculence of expression, we can see minds hard at work grappling with problems sincerely and truly. It was never an age of servile submission either to popular taste or to hierarchic discretion. The early schoolmen worked steadily at their problems—Johannes Scotus Erigena (875) with daring, Lanfranc (1089) and Anselm (1109) with a richer feeling, Abélard (1142) with a swifter and more incisive wit, the great Victorines (Hugh, 1141, Richard, 1173) with a more mystic understanding. Ambrose (397) was familiar to them, and Augustine (430), to judge by the many quotations from his works, must have been known by heart. Gratian the monk (1151) inserted St. Augustine in great pieces in his *Decretum* and thereby influenced all the ages to come. So finely were the principles of war and peace settled by St. Augustine that modern social

primers often quote him verbally, not knowing whence they have borrowed their phrases and explanations.

Certainly such schools as these, grouped by chance around monasteries and cathedrals, and such instruction as could be picked up in the parish churches were gradually forming the minds of the leaders of the people. In his *Institutions of Divine and Human Study* Cassiodorus (575), as we have said, laid the foundations of education—indeed of our own education—since he bequeathed to the mediaeval world the trivium and quadrivium. It was through him that the Middle Ages touched hands with the older world. Nor was he content merely to describe education in the abstract; he described only what he had actually begun to do. He wrote out of experience. Although he was no Benedictine, his influence was no less important on that account; he started the mediaeval world on a system of education based on literature and the arts. This was widened through Spanish influence. Europe was especially affected by two Arabs, Avicenna (1037) and Averroes (1198), and two Jews, Avicbron (Ibn Gabirol) (1058) and Maimonides (1204). When we look for sure proofs of schools and a *scolasticus* (Paris University does not properly begin until after our period, in 1215), we find a definite system in existence before Charlemagne, with studies and a curriculum apparently in undisturbed possession as though it were a venerable and already well-worn thing. How it grew we have not yet discovered; that it was already operative in the seventh century we know. The greater names, besides those we have already mentioned, are Isidore of Seville (636), Bede (735), Alcuin (804), Rabanus Maurus (856), Luitprand (972), Gerbert (1003), Fulbert of Chartres (1028), Alain of Lille (1203), John of Salisbury (1180) and Anselm of Laon (1117).

V. The study of canon law toward the end of our period developed not merely education, clerical and lay, but also what there was of social science. By the eleventh century there were already very rich collections of decrees and decisions, drawn from everywhere, canons of general councils, papal letters, extracts from the fathers and the *Liber pontificalis*, anecdotes, even tags from Roman law, some genuine and some forged by Frankish clerks. These decrees and decisions are naturally concerned with the very matters that interest us: the social rela-

tionships of men, adjustable and to be adjusted, marriage, property, trade, usury, competition, wills, crime. Moreover general propositions bearing on the relationship of law to custom, of general law to particular laws, of common law to local privileges, were discussed by unnumbered commentators. Clerics whose business lay with particular men and women (whose lives were known to them to be full of difficulty) are found endeavoring to bend some rigorous phrase of Roman law or barbaric usage to suit a hard case come up for adjudication.

Roman law itself had lingered on in southern France and in parts of Italy, surviving in a more or less corrupted style. But the later introduction of the *Corpus juris* of Justinian, largely under the inspiration of Irnerius of Bologna and also his four disciples, Bulgar, Martin, Hugh and James, threatened to overwhelm the old barbaric usages and the capitularies of the Frank and Lombard kings. The detailed study of Justinian's work shows that it not merely recorded a host of cases already tried and settled but also contained the principles of law upon which judgment might directly be based. Moreover it did more than merely settle cases; it trained minds. It was an affair of thought and argument, of nice precision, and in this respect went beyond the cumbersome compilations that were all the barbarian codes had to offer.

In time a reaction, mainly influenced by the new national spirit, set in against the code, and the swing of popular fashion turned once more in the direction of local custom. Between this and canon law there had already been much affinity, due in part to the fact that lawyers often had to be prepared to plead in both civil and spiritual courts. These lawyers were practically all clerics. The result was that the two kinds of law reacted on one another. Roman law trained the canonist to logic, while canon law gave a bias to the Roman lawyer in favor of regarding the sovereign as an arbitrary legislative power. Papal supremacy thus led on to royal supremacy, for those who accepted papal legislation as beyond appeal were likely to treat as reverently the decisions of any other monarch.

The administrative as well as the legal mind of the time saw grave implications in the mutual influence of the two codes. The imperial ideal had never failed in Europe. Even when the title of emperor seemed in abeyance in the West, and before the pope had revived it to grace the glories of Charlemagne, we find St. Bede in his *Ecclesiastical History* using it freely.

Thus he distinguishes between *imperium* and *regnum*, applying the former only to a ruler who had power over other kings. The Anglo-Saxon kings continued, in their coronation service, phrases that linked their sovereignty with Rome. It may have been for this reason that the pope chose an Englishman (St. Boniface) to anoint and crown Pepin, whose accession represented the final overthrow of the old Merovingian line. The very fact that the Merovingians had been allowed to go on reigning but not ruling suggests a veneration for mere theoretic kingship that in so fierce and rude an age is unexpected. This may have been not Roman so much as barbaric; at least it shows a respect for mere royalty of blood.

Yet from the beginning the royal power and prerogative were held to be limited; in early society the force of custom was so strong that the king was as much bound by it as were his subjects. Usually at the beginning of his reign he promised to observe the laws and customs of his people before he was accepted as "full king," so that he entered upon his office on a distinct understanding that he was not to go beyond what his predecessors had sanctioned. Many monarchs lost their thrones because they underestimated the force of custom. Restrictions from an earlier age might be false and cramping, but to overthrow them immediately was to destroy the basis of the sanctity of government. The monarch in primitive society who attempted too hasty and drastic reforms frequently ended by being himself deposed.

Throughout this period we find that the second check on the power of the king was the rise of a nobility which succeeded in obtaining hereditary offices in the royal household, and ultimately a hold on the crown itself. Thus the house of Pepin, as mayors of the palace, made their position hereditary and secured eventually the crown of the phantom Merovingians, but met, themselves, a similar fate at the hands of the Capetians.

The third check on the royal power was the rise of the estates. However, their influence was not strongly felt until after the period we are now considering. Only in Spain were they important at this time. But the fate of the Christian kingdoms in Spain was too much the sport of war for them to retain their primitive note of democracy, and the premature attempt at representative government could not survive.

Although the king's power was checked and

was to be even more limited, he had many prerogatives that increased the prestige of his royalty. He had some sort of consecration; he was a sanctified person; he was as much "the vicar of God" in his own sphere as was the pope in his. Moreover, besides his sacred character as the personification of his people, he was, on the same principle, their supreme judge. He was not the fountain of justice, for there were remnants everywhere of the tribal courts which had been older than the royal courts. He was, however, the supreme administrator of his people. Except on his own personal territories he exercised this administrative power through officials who were local, like the *comites*, or centralized, like the officers of the household. These office holders all tended to become hereditary and irremovable, and the kings found that their best protection against this situation was to choose their personal administrative court from the clergy.

Administration implies finance and the royal mint with its officials was a natural development. Originally, it is probably safe to say, the exchequer dealt in the main with justice and was a court of fines, so that money came to it principally as the perquisite of justice. But the increasing determination of the king to be the real controller of his people's destiny made larger financial resources imperative for him if he was to interfere effectively and take over what had hitherto been done by war lords, or inaugurate what had hitherto not been done at all. Hence the gradual evolution of the exchequer into what was primarily a centralized treasury. In these earlier days of mediaeval national life the increase of royal power meant the multiplication of royal officials, and the multiplication of officials, stationary or *on-eyre* (the Carolingian *missi dominici*), meant both greater need of money and greater importance attached to local meetings that could raise money. Thus the more extravagant the king, the more he fostered what might become representative government.

VI. This development was no silent evolution, nor was it altogether blundered into by accident. It was part of a general and orderly movement, pushed on alike by needs and by theories. We cannot consider these ages apart from their thinkers and writers who influenced enormously the particular shape that mediaeval life assumed. Of the chief determining personalities, one opens and the other closes our period.

There can be no question that St. Augustine (430) and St. Thomas Aquinas (1225-74) between them molded the thought of the earlier and later Middle Ages. Of these St. Thomas was the more consistent and systematized and St. Augustine the more original and versatile. St. Augustine was of the African shore and lived in the two political centers of the West, Milan and Rome. The influences to which he was subject are clear everywhere in his writings; he is half Eastern or African, and half Roman and of the West.

His political doctrine can be seen in almost all his works, but chiefly in his *City of God*, a rambling disquisition on the church and the empire, on the earthly and the heavenly Jerusalem, on politics, history and religion. He is working out in it not one thesis but a score, so that he follows no one argument nor any particular metaphor. The book has different meanings according to the point the author is trying to prove. Generally we can be sure that he holds the great stoic doctrine of a division between nature and convention, equating it with the Christian doctrine of the fall, believing nature to exist in innocence, and convention to be the remedy discovered by man after the introduction of the mischiefs of sin.

The three great institutions of social life, namely government, private property and slavery, are all defended by St. Augustine as being the inevitable results of the disorder effected by sin. Had men not sinned, these institutions would not have been necessary. Man having sinned, the need for these three became imperative. They are not created by any legislation, for they are presupposed in all codes. Therefore, he argues, they must have been inherent in primitive society and have evolved through experience. While they might never have been discovered solely through abstract thinking, their emergence was inevitable, since without them social life is impossible. If any society discarded them, it would be forced to return to them, since they are the inevitable and divine remedy to pacify and set in order the greedy desires of sinful man. What we would now call communism, or even the academic theory of socialism, would be judged by St. Augustine and all his followers as a possibility only for saints. To be workable, they require "unfallen" nature. Between man and such a memory, said a later mediaeval writer, stands an angel with a flaming sword.

The main contention of St. Augustine is that

over all is the rule of God. This "eternal reason" which creates and gives purpose to every part of creation as well as to creation itself has also been imaged in the being of man and is reflected in his intelligence and will. But the fall disturbed the harmonies of man's nature and troubled the reflection of this eternal reason. Hence sin disordered not merely the emotions and passions in their relationship to the will but the mind also in its relation to the divine law. Hence came the imperfection of man's knowledge, for the reflection of truth was distorted by sin. Revelation helped man to recognize the truths which our now disturbed and ill-balanced reason could not have discovered for itself. Here lay the importance of the "teaching church" for the civil power. It was the business of the church to decide what was morally right and just; and consequently in order to prevent the natural and now fallen reason from false judgments it had a definite jurisdiction, not over the civil power but over its laws and directive administration. It made no laws and had no temporal rule; but it could and should judge laws in order to see if they were just, and it could reprove the temporal ruler who failed in his sworn duty to his subjects or to the church.

It was because St. Augustine placed the purpose of man's creation in the enjoyment of God, and also laid down the principle that both church and state were here to help the achievement of that purpose, that his doctrine of political and social theory led to conflict between the two powers. It is necessary to recognize that the troubles which followed were produced not by any depreciation of the civil power but rather by the assignment to it of a place where its sphere was not only moral but religious. Thus Ambrosiaster (*circa* 390) said of the monarch that he was to be revered on earth as vicar of God (*adoratur in terra quasi Vicarius Dei*). Aquinas spoke, too, of kings as "ministers of divine providence." Once it was settled that the primary object of civil government was to help men toward the accomplishment of their purpose (namely the enjoyment of God), the state was furnished with a pretext for interfering with the church. Investiture and the other topics of controversy showed that opportunities for interference would not be wanting. St. Ambrose had endeavored to forestall this by reminding the Emperor Valentinian that "in matters of faith it is the bishops who sit in judgment over emperors and not emperors

who sit in judgment over bishops." But this was merely a reminder of the older teaching. Church and state had, since the days of Constantine, been held to be separate. So it had been stated in the teachings of the popes and the earliest political writings of the fathers. The idea was implicit in Christianity. A pope like St. Gregory the Great might be a little more tender to the civil power than the strict letter of the law obliged, but only because he believed that the end of the world was imminent. He would do nothing in the chaos caused by the collapse of imperial rule in the West to weaken still further the prestige of Byzantium.

The next centuries of prolific political writing naturally center around the renaissance of culture under Charlemagne. The Carolingian ideals were high; the civil power in this new era was eager to work with and through the church for the betterment of mankind. Both East and West still looked upon themselves as a single unity; the claims of Charlemagne were recognized by the Emperor Nicephorus who saluted him (811) as the Augustus of the West, the successor of that other Caesar whom Diocletian had deliberately created. There is little difference of political theory on this point to be noted in men like Sedulius Scotus (884), Abbot Smaragdus (830), Jonas of Orléans (843), Rabanus Maurus (856), Archbishop Hincmar (882), Hugo de S. Maria (1119), John of Salisbury (1180), and the rest of the writers who came between Gregory I (604) and Innocent III (1216). With some minor peculiarities they maintain for the most part the same attitude to the relationship of church and state, namely the separation of spheres, the spiritual right of the church to judge the laws of the state, the absence of any right on the part of the church to legislate in temporal affairs. Moreover this position is maintained on the principle expounded by St. Augustine, inherited by him from the earlier fathers, and by them derived from the stoics—namely the dual nature of man, his former innocence and his present sinfulness. In his former state man was free and equal and without possessions; since the fall he has needed to be set in a social hierarchy, to be in submission to someone else and to have property of his own. Thus Archbishop Agobard of Lyons (840), for instance, forbids the baptism of the slaves of Jews without the leave of their master, because "by nature all men are equal." So, too, Gregory VII (1087) denounces the civil authority as

the devil, meaning little else by this than that it is a remedy, even a divine remedy, introduced to deal with sinful and therefore rebellious man.

We have henceforward a growing host of writers who discuss the principles of morality in political and social life, since Christendom has grown conscious of itself and has settled down to a state of peace. The great experiment was being made of a polity of Christian people, the principles of whose rule were to be the Ten Commandments and the laws of the church. Our period witnessed its beginnings, crude,

simple and tentative; within a hundred years Aquinas had organized these beginnings into a logical system and given them relationship and a defense. But our period does not pass beyond the era of vigorous originality, of an intense desire to solve in accordance with Christian principles the problems of the new Europe; an era of high hopes and great ideals on the part of pope, bishop, emperor, lawyer, priest and poet, dealing with violent excitable folk who listened but would not obey.

BEDE JARRETT

V

The Growth of Autonomy

I. INTRODUCTORY. To the student of social theory the Middle Ages present a twofold spectacle. On the one hand he sees the attempt made by the church to concentrate and unify the social activities of Christendom in an all-embracing system of thought and action: at the heart of this lies its sacramental doctrine, guiding and directing the believer through his temporal life to eternal felicity; its agents are the hierarchy, its intellectual weapons the theological schools and universities, and its outward appeal is the wonderful and harmonious architectural constructions, the mural decoration, the sculpture, the glass, the smaller, intimate arts that humanize man's existence. On the other hand he is strongly conscious of the immense variety of local life and of the number of self-sufficient institutions; of the rich growth of corporations or quasi-corporations, and the universal prevalence of "liberties" or jurisdictional rights over persons and territory; these seem to exclude the operation of a central power, and rule out the modern idea of a uniform authority extended over a homogeneous national area, which forms the basis of the state. But the impression in its earlier stages, that is, at any rate, during the twelfth and thirteenth centuries, is not one of contradiction. The theory that postulates the unity of European civilization does not demand its sharp unification. The metaphor of the body, so plentifully used by church writers and reaching its fullest articulation in John of Salisbury, represents most closely the mediaeval idea of this organized life, in which sovereignty does not offer itself as a problem in the way it does to the modern mind, since the idea of law as the *fiat* of determinate human will has not yet come to upset the balanced automatism of local institutions.

Social thought began by a full recognition of the organic character of Christendom: then, as unity overreached itself and spelled unified subjection, as the papacy utilized spiritual methods and resources for temporal ends, the reaction against unity set in, and the national centers asserted themselves. If there is any date

assignable to the beginnings of nationalism in Europe, it is the latter part of the thirteenth century, and directly to be connected with the Pope's overstatement of his own position in regard to France. The papacy was not pursuing a phantom, however much it may have overreached itself in the pursuit. In that age spiritual power, to be effective, had to possess a temporal basis, and it was the acquisition of this that led to the conflict of the papacy with the Hohenstaufen emperors and later to its immense fiscal system which alienated much of the loyalty of Europe and substituted business for sanctity. To the territorializing and commercializing of the papal ideal, which the movements of piety within the church could not arrest, political Europe reacted or, it would be more accurate to say, Europe reacted politically; and the new nationalistic tendency was augmented by the spread of Roman, as opposed to Teutonic, ideas of law. The mediaeval notion of the rule of law bowed before the notion of law as the positive command of the prince, and the way was open for despotism and ultimately for the Reformation. That course might have been saved had men in the early fifteenth century found it possible to agree upon an international form of church government, and there were the brightest hopes that the Conciliar Movement might show them the way. But the nationalizing process proved to have gone too far, the financial methods of the papacy to have taken root too deeply, for success to be achieved. Internationally, just as nationally, constitutionalism could not stand the test, on the one hand, of self-interest and, on the other, of exclusive spiritual centralization, and the brilliant evening of the Middle Ages closed in starless night. But the movement was not without results for Europe, after the extreme *étatisme* of the Renaissance had provoked its reaction.

II. THE PRINCIPLE OF AUTONOMY. Let us first examine the forces sustaining that autonomy which, as we said, coexisted and could be reconciled with the universalism of the church. It had its roots in feudalism, with its

essential notions of contract and custom; it was perpetuated in the various forms of association, guilds, partnerships and communes, the rich, spontaneous growth of the high Middle Age; and in certain cases it came to fuller consciousness when, often after conflict, the royal power, in virtue of its growing legislative and administrative capacity, was able to guarantee those associations peaceful intercourse within a more or less organized state. We said "certain cases" because in this respect a great divergence is to be noted among the European countries. England, on the whole, was able to preserve a marked balance between the spheres of central authority and of the local communities and organizations; in France the royal power tended to emphasize its centralizing supremacy (for the story of French national unity is the story of the growth of the royal *demesne*); in Italy it was the local urban units which in the long run coped not unsuccessfully with papal and imperial centralization alike; in Germany there was notable variation, as the central authority became divided between the electorates; and in the Spanish kingdom class supremacy and the rule of *fuero* seem to have deadened the normal interplay of local and central forces.

Feudalism was a stage in man's political education before he recovered what had been lost in the chaos of the Dark Ages proper, the sixth and seventh centuries: the habit of obedience to public authority. He had lost it, needless to say, because the state itself had been destroyed, and its place taken first by tribal hegemonies and later by lords powerful enough to give protection to their neighborhoods in return for the tribute of obedience. In spite of the revival of political power in the West in the ninth century, and notwithstanding the Carolingian capitularies (soon to become a dead letter), the place of public law continued to be taken by private law and, except in the countries bordering upon the Mediterranean where written codes were still in vogue, customary law prevailed. Political obligation was thus replaced either by tribal allegiance or by the system of contractual agreements between lord and vassals. Soon tenure of land, rather than the circumstances of birth and descent, came to determine the obligations and the status of the individual. Customary codes guaranteed and stabilized his position, just as in earlier times they had guaranteed his place in the tariff of monetary values marked out by the custom of the *wergeld* or blood-price. Thus we must

banish any notion of conscious and direct legislation before the systematic growth of the royal power took place in Europe. Sir Paul Vinogradoff stated the case exactly: "In rudimentary unions, in so-called barbaric tribes, even in feudal societies, rules of conduct are usually established not by direct and general commands, but by the gradual consolidation of opinions and habits. The historical development of law starts with custom." Or again, in another context: "Law had to be sought and discovered in the vast background of social intercourse."

This is the soil—the soil of private and customary law—from which the characteristic institutions of the Middle Ages sprang. They did not come into existence at the behest of any government which formally licensed them, but were due to the principle of economic necessity or of free association for religious or cultural purposes. Often they had to fight for existence, to maintain which they found it needful to create for themselves a clearly defined corporate life, with governing authorities and a customary constitution. Once organized they were recognized as natural and necessary parts of the social order, fulfilling, as they did, functions which today are normally undertaken by the public authority. This notion was extended to classes just as much as to religious or economic associations. Defense was undertaken by the military tenants, prayer for the whole community by the clergy, work by the rent-paying socagers and the unfree natives, commerce by the burgesses. The autonomous political federations of Germany—the military groups under feudal law (*Lehnrechte*), the sergeancies under their special customs (*Dienstrechte*), the rural districts under peasant customs (*Bauernrechte*) and the towns under borough customs (*Stadtrechte*)—reflected this idea of a specialist and at the same time organic society, each part of which, by preserving its own custom and defending its liberties, served the common weal. It is the same in England. The chroniclers speak of a *communitas barnagii* which they regarded as the political class *par excellence*, the only body capable of getting a charter out of King John; the records tell us of the *communitas ville*, the unit that decided the agricultural arrangements. Feudalism might be imposed on a district from above, as in East Anglia at the time of the Norman conquest, the manor might become the unit to which rents and services were paid, but the custom of the manor, which the lord might not infringe,

poked its head through the network of lordship and vindicated the principle of economic organization among the villagers who in their generations had helped to determine it.

III. THE FORMS OF ASSOCIATION. It was town life which gave birth to the richest variety of experiments in self-government or of voluntary associations for religious or industrial purposes. Economically the town cut across the old feudal manorial arrangement by which the scattered village communities sent their goods to the lord's place of consumption. Founded in many cases originally for strategic purposes, it became the center of both marketing and production, although not in the fullest sense until it had vindicated for itself a direct relation with the royal power or got free, when possible, of intermediate overlords whose officials, like those of the king, it succeeded in excluding. The process by which this was effected was a long and complicated one and cannot be described here; whatever its genesis, the commune stood as the sworn association of townsfolk, formed primarily for the purpose of trade, and governed in the north by its mayor and jurats or *probi homines*, in the south of France and in Italy by its consuls and the various assemblies of the citizens. The corporate status achieved by the town differed in a marked degree from the system of private bargains and obligations prevailing without. Vassalage and serfdom were discarded—*die Stadtluft macht frei*. As has been well said, "its walls, personal freedom of denizens, market and civic immunity made the town a detached unit with an incipient political life of its own." As such it might ultimately find representation in a national assembly of estates.

Within it grew up unions for trading and industrial purposes. The earliest associations of citizens were commercial associations, merchant guilds which were in some cases identifiable with the governing authorities of the town, but in the majority of instances were more like chambers of commerce, entry into which was limited to citizens who were holders of burgage tenements within the walls. The merchants of the guild traded collectively, availed themselves of the privileges granted to them collectively, especially that of pleading within their own walls and of free passage along waterways and roads. But the period with which we are dealing had also seen the rise of groups of artisans organized into groups of fellow craftsmen, themselves the makers, employers and vendors

of their own wares. These associations might have come into being partly through physical contiguity in the same suburb or quarter, partly through common religious observances and festivals. They were controlled by the municipalities, which insisted on a standard of quality, on a "just" price to prevent undercutting or undue enhancement, and on sale within certain authorized hours. The guildsmen themselves appointed their "triers" or overseers to supervise the quality of the work, and held the monopoly both of the industry and of the sales within the town. Collective trading, monopoly, fixed standards from which it was an offense to depart, were the three main characteristics of these organizations.

The city, then, as a place of exchange, a distributor or a vendor of the wares made by its own industrial corporations, was the essential trading agent of the great period of the Middle Ages. But not necessarily in isolation. The towns might ally together in a system, such as the famous Hanseatic League, with its own customs, its "counters" or depots (e.g. the steelyard, or the counter at Wisby) outside its own boundaries, and its own courts and guild-halls. Commercial arrangements between one set of towns and another, e.g. between the Low Countries and the Italian littoral, or between the Gascon communes and the English and Flemish seaports, showed a remarkable variety of corporate initiative, which even a prolonged war did not bring to a standstill. Mercantilism had not yet fully made its appearance, and the trading groups, provided that they could get license to pass in and out of foreign countries and safe-conduct within, took their own way unhampered by national considerations. It would not be accurate to state that the thirteenth and fourteenth centuries knew the full meaning of free trade: foreign merchants had often to pay customs on goods, as the English *nova custuma* show; on the other hand the universal prevalence and applicability of merchant law point to something like an international system of trading, and the great fairs of Champagne were in the fullest sense free cosmopolitan centers of exchange.

The fact that urban society was in essence commercial society had a considerable effect upon the movement of social ideas. It meant that the practise of the towns constituted the main practical criticism of the predominant clerical theories of property and money-making. It has been well remarked that it was money

which altered the attitude of the mediaeval mind to property. To minds of the eleventh century wealth lay primarily in the service and suit entailed by land. Now, as money became the new basis of state organization and elaborate royal exchequers were organized throughout Europe and more peaceful habits prevailed, the idea of *service* grew fainter, and land began to be thought of in terms of exact money equivalents, not in terms of conditional services. Thus land was regarded as a thing in itself, as a source of wealth, something that was coming to be owned directly and absolutely. Here urban conditions showed the way. The researches of M. Des Marez in the history of the Flemish communes in the thirteenth century have revealed the movement on the part of an urban patriciate, itself the result of the process of engrossing tenements, buying up houses under conditions permitting of easy sale and thereby accumulating resources of capital for future use. At the same time the early tendency toward capitalism in the easier and more elastic urban environment was breaking through the usury prohibitions of the canonists and challenging the Aristotelian doctrine that a limit to money-making is imposed by the purpose for which money was made. Father Bede Jarrett has spoken of the moral difficulty that confronted mediaeval writers "of making profit-taking in trade fit into the scheme of the gospel." The doctrines of mediaeval theorists have been accepted far too literally as corresponding to established fact. Apart from the practise of the Italian city-states, where there was extreme latitude, the papal curia at the beginning of the fourteenth century was itself no mean profiteer, and never above taking money from its bankers at no mean rates of interest.

But mediaeval communities were by no means exclusively commercial: they were religious and governmental, too. The development of the indulgence system by the church led to the formation of various fraternities, often called after the saint to whose shrine indulgence-bringing pilgrimages were made. The participants were admitted to profit by the merits their saint had acquired, and later the fraternity system developed along the lines of provident, burial and intercessional societies. In the institution of monasticism, the most coherent and powerful of the forms of association in the Middle Ages, the religious houses were in a

very real sense communities, although the degree of self-government varied according to the type of religious order. It has been argued with some plausibility that they exemplified the nearest approach to communism seen in the Middle Ages; for the original purpose of the Benedictine rule was to found independent families of religious, whose individual members lived in poverty which, together with chastity and strict obedience to the superior and the rule, was considered necessary for the imitation of Christ. It is impossible to enumerate here even a fraction of the self-governing charitable institutions of the church. But if we pass to secular society outside the towns we shall not be able to withhold the notion of community either from the franchises of great lords or from the counties of mediaeval England. The "liberty" (public jurisdiction in private hands) was a unit of government that ran itself, with its own officials responsible to their lord, who in turn was responsible for its conduct to the royal power, although the extent to which that responsibility was realized varied very greatly in the different countries of Europe. Here the nexus of union was service to the center of jurisdiction, the suit to the lord's court. Suit to the common center was likewise the bond of that most real and effective of governmental communities, the English shire, quickly called into self-realization by the work put upon it in the way of taxation and justice by the English monarch, and finding methods of representation through the very machinery that royal inquests of all kinds had made normal and necessary.

The legal status of these most variegated communities differed surprisingly. It is extremely difficult to know how far we may predicate corporateness, for example, of a fraternity, to what extent the community of the shire, embodied in the county court, had the legal personality possessed by an abbot and convent. But one generalization may be attempted. The mediaeval king might confiscate the temporalities of a convent, he might take a town or a liberty "into his own hand"; but he would not permanently alter their status or, unless they belonged to an enemy power or had entirely outlived their original religious purpose, suppress them. They were part of the social order, their positions were guaranteed by written or unwritten custom which it was his duty to preserve. The coronation oath which he took was the oath to defend this

highly articulated order, to forbid rapine and the encroachment of one section upon another, or of individuals upon any one of them. This was involved in the idea of the rule of law, the most powerful and lasting contribution of the Middle Ages to modern political thought.

To the mediaeval theorist of the thirteenth century the conception of the monarch as the source of law and superior to all law was, as we observed, alien. When Bracton said that the king was under God and the law, he was saying something that all western Europe could understand; for to holders of this view law was the bond uniting the various parts of the body politic, preserving communities and individuals alike in their different estates. The king's court was the body which was the guardian of this cohesive system of rights, the source of appeal if any were infringed, and the collective arbitrator when doubtful issues arose. On this point the weighty judgment of Dr. Carlyle should be heard in full: "It is only when we take account of this fundamental principle of mediaeval constitutional law that we can properly understand the real significance of that famous clause of Magna Charta in which it is laid down that no free man should be imprisoned or disseized or destroyed or even attacked without the legal judgment of his peers or the law of the land. We are not here concerned with the detailed interpretation of all the phrases of the famous passage. . . . It is enough for us to observe that it is not an isolated attempt to establish some new principle of the law and the constitution, but that it was in its most essential principle nothing but a restatement of the fundamental principle of the feudal and constitutional system of the Middle Ages; that whatever authority was possessed by the lord or prince, it was limited and controlled by the law, and that this law had as its guardian a properly constituted court, and that this applied to the king or emperor as much as to any lesser lord."

The idea of the limitation of political power, as understood by the British and American peoples, derives in the first instance from the doctrine and application of the rule of law in mediaeval English government, and has its rise in the feudal guarantee of rights and the determination, put more than once into practise, to insist upon it. That guarantee was given a contractual form, for contract was the essence of feudalism. In the insistence upon the contract, first the baronage and then the organized com-

munities of the land in Parliament made their great contribution to the destruction of absolutism. But neither the royal power nor the communities were wholly or permanently successful, and this equilibrium, which is found also in subsequent constitutional history, serves to explain why in England today monarchy coexists with democracy.

IV. THE UNIVERSAL SYSTEM. We have seen how the feudal organization of society with its notions of contract and custom insured the status of the community life of Europe and held at bay the idea, ultimately to triumph, that the will of the prince has the force of law. From the diversity of group life, so guaranteed, we must turn to the unified system of administration and theory that prevailed in spiritual and temporal matters during the thirteenth and the following two centuries.

It must be said at once that the unity of Christendom was a fact only in a very limited sense. What actually existed under Alexander III and the greatest of his successors, Innocent III, Gregory IX and Innocent IV, was a central court of church law for the whole of Europe, a highly centralized spiritual administration that never ceased to develop, and a more or less complete enforcement of canonical obedience to superiors and so ultimately to the papacy. In temporal matters there was the Holy Roman Empire, in theory universal, in practise confined to the Germanic kingdoms and Italy, never embracing France, England, Spain or the Balkans. If we look more closely we shall see that only at a comparatively few periods was imperial supremacy unchallenged, even in Germany and Italy. The pope and the emperor were in theory the two ruling officials of united Christendom: in practise they had been and were continually fighting each other, and at intervals the internal structure of their own monarchies was shaken with the gravest dangers. Yet there was unity of Christendom through a powerful threefold nexus: the sacraments of the church, canon law, the Latin tongue. Furthermore before the end of the thirteenth century the papacy had been able to mobilize the western nations in the crusade, the symbol of European unity against the infidel in the East. Thus unity, administrative, literary and militant, indeed existed; and churchmen maintained the ideal of a Christendom multiple in function, one in spirit, continually floating before men's eyes. Nor should we forget the art

which in the *tympana* of the doors, in the sculpture and painting of sacred buildings, gave illustration to that ideal, exemplifying the passage of man through the present life, under the church's guidance, to his eternal felicity or, apart from the church, to his eternal damnation.

We cannot but be struck by the contrast between the early Christian communities and the Catholic church of the twelfth, thirteenth and fourteenth centuries. As Troeltsch has pointed out, the peasants and fishermen who gathered round Christ and the Apostles were not official rulers nor learned doctors, but derived their leadership from religious conviction and prophetic spirit; on the other hand the church of the central Middle Ages had developed a powerful and complex hierarchy, "armed with scientific doctrine and superior technique." The power of the hierarchy, manifested in many characteristic ordinances, and the obedience it claimed were derived from its position as shepherd of the Christian flock. Care of the sheep carried with it the authority over the believer. But in process of time and with the development of doctrine this position had come to rest not merely upon the evangelical command but upon the sacramental duties of the priesthood. To all alike the hope of salvation was vouchsafed by the miraculous grace of God, and to that miraculous grace Christian thinkers traced the reversal of the general condemnation of mankind through the act of atonement—the incarnation, suffering and death of Christ. The efficacy of the reversal for each individual depends, however, upon the personal reconciliation and regeneration; and, as Troeltsch pointed out, the miracle of grace is prolonged in the shape of the mystic life of the church, which unites the living and the dead, and helps all struggling for salvation against sin in this life. Dante expresses this idea of the mystic unity and miraculous mediation of the church in the beautiful version of the Lord's Prayer put into the mouths of the souls in purgatory waiting for salvation (it has the ring of Virgil's "*tendebantque manus ripae ulterioris amore*"):

Vegna ver noi la pace del tuo regno
Chè noi ad essa non potem da noi
S'ella non vien, con tutto nostro ingegno.
Come del suo voler gli angeli tuoi
Fan sacrificio a te, cantando Osanna,
Così facciano gli uomini de' suoi.

The doctrine of the church as, again in

Troeltsch's words, the "sacramental institution for salvation," is the cornerstone of Catholicism and its concrete development. Grace, the sole means to salvation, is conferred by the seven sacraments, covering the whole range of man's spiritual requirements. The church's object, her *raison d'être* itself, is to convey these sacraments to men.

The mystic life demands an organization. Von Hügel in his address on the essentials of Catholicism has remarked that Catholicism is essentially organic. The social body it aims at building up is constituted by the several groups of men, down to the individual souls; to those groups and individuals "it gives their characteristic functions and delicate irreplaceable reactions." The organism must have a directing soul which moves the various members. In the mystic body of the church the direction comes from the head, Christ; but the visible acts of the organism depend on constituted authority, and this authority is the papacy. It would be impossible here to give any account of the gradual development of papal power in the church: we need merely call to witness the monarchical tendency of political theory in the later Middle Ages, due to what Vinogradoff has termed "the historical necessity of concentration amid the centrifugal movement of a society broken up into a quantity of local units and composed of a multitude of heterogeneous elements." That concentration arose first from the challenge to Rome's authority offered by the Donatists and by the Arian revival in Visigothic times; it continued in the struggle to claim church property from lay hands, which underlies the various Donations, true or fictitious, and the Forged Decretals; it was sharpened by the opposition of the Eastern Empire; it was developed in the struggle for tithe, and then in the great movement for the defeudalization of the church that culminated in Gregory VII; it was augmented by Innocent III's schemes for clericalizing society, for engendering in all believers the ecclesiastical point of view, and after the life and death struggle with the Hohenstaufen it reached a commercial climax at Avignon.

The legal weapon that held the centrifugal tendencies at bay was the canon law. Maitland described this system in unforgettable words: "It was a wonderful system. The whole of western Europe was subject to the jurisdiction of one tribunal of last resort, the Roman curia. Appeals to it were encouraged by all manner of

means, appeals at almost every stage of almost every proceeding. But the pope was far more than the president of a court of appeal. Very frequently the courts Christian which did justice in England were courts which were acting under his supervision and carrying out his written instructions."

By the thirteenth century the canons had provided the system of organization to the church. The laity was reduced to a condition of obedience: the life and position of the hierarchy of clerks were regulated in every detail, and the papacy had begun to intervene in the political relations of one ruler with another through claiming judgment in cases of sin. Innocent III expressly kept clear of questions of feudal law; but on moral questions the ecclesiastical tribunal might step in and judge the recalcitrant prince. Thus in both spiritual and moral affairs, in all matters relating to the sacramental life of the church, the church's unified and centralized legal activity claimed and did in fact exercise supreme competence with the concurrence of society. And just as the church in her world wide claims and administration was the political legatee of the single world wide empire of Rome, so in her language she maintained the unity of this legacy, and developed in it the wonderful flexibility of a still living tongue, both in her hymns and her poetry which called on men to look with expectation to the one republic on high:

Bone pastor, panis vere
Jesu, nostri miserere.
Tu nos pasce, nos tuere,
Tu nos bona fac videre
In terra viventium.
Tu qui cuncta scis et vales,
Qui nos pascis hic mortales,
Tuos ibi commensales
Coheredes et sodales
Fac sanctorum civium.

The writer of these simple lines of immediate appeal was the author of the most profound philosophical treatise of the Middle Ages.

In a rough age unity of the faith could not be procured by spiritual weapons alone, nor could breaches of that unity be punished solely by the normal penalties of interdict or excommunication. Churchmen had to make up their minds upon the problem of force, whether, when and how it was to be resisted or used. It was part of the church's duty to restrain the love of mere violence and the bestiality which disgraced the life of the military classes; and restrain it

she partly did by instilling into their minds the principles of chivalry, or by diverting the emotionally awakened West to the defense of the holy places in the crusades, or by leading the forces of the orthodox against those tainted with heresy. The ceremony of conferring knighthood, the military orders which held the points won in Palestine after the crusades were over, and the Holy Office of the Inquisition were the legacies of the solutions adopted in these three cases. Chivalry was the most characteristic and significant, because it was the most normal, of her methods. The various mediaeval statements of a knight's duty which have come down to us are strongly ecclesiastical. The knight must hear Mass daily; he must die for the faith, if need be, must protect widows and orphans, not make war without good reason, not espouse unjust causes; he must bear himself humbly in all things, and it is his duty to preserve the goods of his tenants and do nothing contrary to the interests of his suzerain. Fidelity to the suzerain was emphasized as a guarantee of social stability in an age when the peace of society depended on the keeping of feudal engagements. The unity of Christendom in the faith and the preservation of the peace were the aims of the church in society. War she could not prevent, but she could harness and moderate it. It cannot be said that she entirely failed in these tasks—at any rate until the fourteenth century. And so deeply did the idea of unity strike that even when it no longer could or did exist, it formed the mainspring of the noblest ideal of a united Christendom ever propounded by political thought—the *De monarchia* of Dante. This tractate is all the more striking because it was written by one who had no sympathy with clerical government, by a "white" Guelf who had suffered the loss of all through the machinations of Boniface VIII in league with Florentine commercial interests. It is a great plea for universal empire, the only condition of peace, since a unity of discordant wills can be secured only by the governing will of a single person. Dante argues that the proper function of the human race, for which God by His art has created it, is to bring into play the whole capacity of the possible intellect for contemplation and for action, and that this can only be achieved when the one guiding power, the emperor, by his rule of justice spreads peace and creates the opportunities for this intellectualized activity. His argument that this empire is the Holy Roman Empire, the prolongation of

the divinely willed Roman Empire, is not so important for our purpose as his demonstration, carried out by pointing to the end of the human race, of the necessity for world wide unity, and his conception of the emperor as a permanent source of international justice and an impartial tribunal of international arbitration.

V. THE SCHOLASTIC PHILOSOPHY AND ITS VIEW OF SOCIETY. The central period of the Middle Ages is the period of the *Summa*: that is, of the attempt to synthesize all knowledge and speculation in a single body of Christian philosophy. The *sapientia christiana*, which this was called, is the intellectual form of the legal and administrative control which the church attempted to exercise over the spiritual life of Christendom. It included the twin spheres of faith and reason, dissociated by St. Thomas Aquinas who, following his teacher Albertus Magnus of Cologne, broke the spell of the Augustinian theories. The emphasis which he laid upon free will undermined the Augustinian idea of predestination, the real principle of division between the two cities in the *De civitate Dei*, while his theory of knowledge aided in developing and enriching the notion of human personality to an extent impossible while the intuitionist doctrine of knowledge held the field. The philosophy of St. Thomas, besides bringing to its mediaeval culmination the notion of the *person* as an independent center of thought and action, made to social theory contributions along two very important lines: on the model of Aristotle it took as its governing principle the notion of *purpose* in the world-process; and it gave prominence to the idea of *law* as sustaining both the physical cosmos and human society in its various groupings and units—the philosophical counterpart of the idea of custom noted above.

St. Thomas took over Aristotle's conception of nature and regarded it as the agent of God. With Aristotle he asks, in his *De regimine principum*, what is the purpose of the state and, more widely still, of society as a whole; with Aristotle he concludes that it is the virtuous life—but that is not enough: "since the virtuous man is also determined to a further end, the purpose of society is not merely that man should live virtuously, but that by virtue he should come to the enjoyment of God." Now if people could achieve this end by natural capacities alone, it would be the duty of kings to direct them to it; but the fruition of God, a mystical

ideal, cannot be achieved under temporal direction: it belongs to divine government. Thus "the administration of this Kingdom has been committed not to the Kings of this world, but to priests, in order that the spiritual should be distinct from the temporal; and so to the supreme Pontiff, the representative of Christ." The method of St. Thomas is clear. The character of the supreme directing authority of society depends upon the purpose for which society exists; and because that end was a divine end, logically the government of this world should be a theocracy. It was open, as we have pointed out elsewhere, to any thinker after St. Thomas to use the Thomist method of relating social activities to their ends, but to hold that the purpose of society was not an otherworldly one; to deny, in fact, the transcendental view of the objective of human life, and to go no further than to suppose that the end was temporal happiness or smooth administrative efficiency.

The idea of law in St. Thomas is the complement of his theocratic doctrine. Blessedness, the divine end of man, is achieved through life lived justly in a society in which law governs and directs. For St. Thomas law is not first and foremost the determinate command of some human superior, but "a rule or measure of actions," dictated by reason, aiming at the highest good, not at the profit of individuals. It reflects the *ratio*, the reason (or, better, "reasonableness") in which both ruler and ruled participate, a reason which, just like the individual purposes in man, serves and is set in motion by the "highest reason existing in God." Human law must be in accord with these natural or reasonable principles: it need not be dictated by nature, for obviously *jus civile*, positive or conventional law, is not, but it must not be opposed by nature. "Every human law has as its condition of being a law that it shall be derived from a law of nature. . . . It is of the essence of a human law that it should be derived from the law of nature." Thus just as the purpose of each individual life serves a supreme purpose, so individual laws serve and "respond" to a supreme law; and the doctrine of purpose which we noted above is applied to the juridical sphere in such a way as to provide a criterion for the positive enactments of the prince. That the prince should observe the law constituted no lack of sovereignty for him, if we accept this definition of law. Thus political philosophy came to the support of constitutionalism.

VI. THE REACTION AGAINST THE THEORIES OF THE CHURCH. Since the death of Innocent decretalists (the commentators on the Decretals of Gregory IX) had never ceased to extend and exaggerate his statement of the papal claims. It was they and the papacy by its temporal demands and the fiscal measures undertaken to satisfy them that led the secular power, Philip IV of France in particular, to challenge the doctrine that the papacy possessed both spiritual and temporal swords and the declaration of Boniface VIII to the effect that the subjection of every human nature to the supreme pontiff is necessary to salvation. The lay argument, in the mouth of John of Paris (1302) for instance, is put in a feudal form. The royal power is in no sense derived from the papal, but from God. The king of France holds from none but God alone. The author of the *Disputatio inter clericum et militem* (about 1296) claimed for the king of France legislative power similar to that of the emperor. "The author," remarks Dr. Carlyle, "is clearly thinking of the legislative power of the French king in terms of the position of the emperor in Roman jurisprudence, and while he formally allows for the possibility of the king legislating with the advice of his *proceres* (nobles) he does not think of this as essential." The Roman influence is significant, for in other writers it led to a more far-reaching thesis: the denial of the theory of law adumbrated above (not a denial that law should be reasonable, but a denial that any man or body of men have the right to proclaim the prince's law to be unreasonable) and an attempt to limit it to purely temporal origins and circumstances. The civilians of Bologna, following their Roman models, derived it not from custom or nature but from the definite human will of the ruler, on whom the people had conferred its legislative power. The remarkable theorist, Aegidius Colonna, would go further to argue that it is better to be governed by the prince than by the law.

The most powerful theoretical attack on the papal claims came from a Paduan physician and a French Aristotelian, Marsilius of Padua and Jean of Jandun. The occasion was the struggle of the papacy against the Emperor Lewis of Bavaria, the ally of the Angevin Robert of Naples and the firm opponent of the Ghibelline leaders in Italy; and it is significant that the authors, shortly after writing their book, betook themselves to the court of Lewis

at Nuremberg, and that Marsilius followed the emperor to Rome, where he attempted to put some of its doctrines into practice. Marsilius had seen much of ecclesiastical interference in northern Italy, and without doubt the condition of his native Lombardy chiefly moved him to write the book. In order to demolish the theory of the papal *plenitudo potestatis* he had to prove two revolutionary theses: he had to show that no special divine revelation created the papal supremacy and ecclesiastical jurisdiction, and that the very nature of the state excluded their operation. He had therefore to discuss the nature of the state and to analyze ecclesiastical government. The purpose of the state he defines in the words of Aristotle: it is a perfect, self-sufficing community aiming at the good life—but in this world only. It contains various orders and groups, among them the priesthood, the *pars sacerdotalis*; but the business of the priest is to administer the sacraments and to prepare men for the future life, not to take part in the politics of the present. That social peace may be secured it is absolutely essential that the secular power which governs should be supreme: and this power is the assembly of adult citizens, the *legislator*, which in matters of administration is represented by a *pars principans*, the executive body, elected by the *legislator*, whose authority must be final and absolute, unique and undivided. Marsilius will not allow the priesthood to have any coercive jurisdiction. His analysis of ecclesiastical government confines the functions of the priest to the sacrament of penance and the celebration of the Eucharist. Excommunication, if inflicted, can only be so by the local assembly (which, being Christian, he terms the *legislator humanus fidelis*). The clergy must possess no property but, like the Roman priesthood, be provided for by the state whose servants they are, and elected by the Christian citizen assembly. The papacy is not a creation of divine revelation: it is an administrative episcopate, and all bishops are indifferently successors of the apostles in general.

This frankly Erastian treatise, almost immediately condemned by the papacy (and what wonder?), is remarkable for its absence of internationalism, its lack of arguments for a world wide empire such as Dante had foreshadowed. Its hard realism breathes the spirit of a commercial city which had had enough of the interference of a universal power. But Marsilius does provide some international machinery for cases where there are differences of interpre-

tation in the church over scripture or dogma. Then a general council must be summoned, the representatives being clerks and laymen elected by the *legislatores humani fideles*, the Christian citizen assemblies. The idea of a general council was by no means new: such a body under Alexander III (in 1179) and Innocent III (in 1215) in its decrees had registered papal policy with the support of the church; yet the council now thought of was not to be held at the behest or for the assistance of the supreme pontiff but for the decision of difficult matters in the church, where the papacy could not avail. In this sense and with this intention there had been an anticipation in the treatise on Conciliar government by William Durandus in the thirteenth century. But the demand for such heroic remedies was not loudly heard until constitutional doctrine arose to meet a situation in the church unparalleled for the length of its duration and the evil of its consequences: the Great Schism of 1378-1409.

The period of the Avignonese captivity in the papacy had been marked by fiscal reforms and experiments on a large scale. By leaving Rome (which, because of the quarrels of the great families, would have been necessary in any case) the popes lost large sources of revenue; but apart from this there were petty wars in Italy to finance, the patrimony to protect, a residence at Avignon to be constructed; and to meet the needs of a greatly increased budget they had to strengthen the financial machinery at the expense of the local churches. This was done principally by increased taxation of all kinds, and by a system of collation to benefices which reserved more and more classes of livings and cures to the papacy and annoyed ordinary collators, especially the national monarchs. The curia was reorganized and centralization in the church reached its climax. This concentration had the effect of arresting the measured flow of canonical obedience through the grades of the hierarchy; it disturbed the ideal symmetry of the church by undermining the authority of prelates. The lack of discipline in the pre-Tridentine church is the direct result of the numbing of diocesan life and activity or, to change the metaphor, of Rome's short-circuiting of her subjects. The great protest against this suppression of local life came in the constitutional outbreak which we know as the Conciliar Movement. By character this was early mediaeval through and through in its

attempt to foster local church life through representation, to get back once more to the graded type of society, to call into active being the diocesan communities undermined by papal collation to benefices and the multitude of papal dispensations and organizations. This, however, did not stand first on the Conciliar program. Reform came after unity, the unity that was destroyed by the competition of Italian and French candidates for the papacy; and when in the Council of Constance unity had formally been achieved, that body was too much divided along the line of national animosities and peculiarities, and too much occupied with the suppression of heresy and with irrelevant administrative matters, to deal seriously with reform. But the rock on which the *causa reformationis*, which was in all good men's hearts, really foundered was the old problem of finance—how to recompense the papacy, which needed every penny it could get now that it had returned to take up its Roman patrimony and inheritance, for the loss of taxes and collations which the reformers demanded that it should undergo, but which had constituted the main source of its revenue during the Avignonese time.

VII. CONCILIAR THEORY. The theory underlying the mass of Conciliar treatises finds its greatest exponents in Jean Charlier de Gerson, chancellor of the University of Paris, and, at the time of the Council of Basel, in Nicholas of Cues, the German philosopher, reformer and later bishop of Brixen. Both believed that the constitutional doctrine of representation in secular politics could be applied to the government of the church: both held that the representative body in the church was the general council. Gerson took his stand on the doctrine of *epikeia*, or the equitable, in place of the rigid, interpretation of law. The schism presented an emergency unprovided for in the law of the church. At all costs the views of extreme canonists had to be overridden and the only remedy tried which was then feasible (1409). In his reaction against the rigid legalism that would permit of a general council being summoned only if the pope gave his assent, Gerson was at one with the spirit of his time, which was increasingly in revolt against the rigidity of ecclesiastical institutions. Cusanus went further than Gerson to argue, rather like Marsilius, that the papacy is an administrative office alone, with no power to veto (as Eugenius

iv did) a representative synod of Christendom. His argument in the famous *De concordantia catholica* rests upon a fourfold foundation: that the character of the papacy is purely administrative; that all power, spiritual as much as temporal, is dependent on the consent of the whole body over which it is exercised; that such consent is conveyed through representatives; and that the representatives of the whole body, in this instance the church, are the council. This doctrine of consent conveyed through representation had, for the papacy, an ugly democratic connotation; and if the system of voting by nations in the Council of Constance had brought national animosities to the fore, the large numbers of lower clergy and intellectuals (doctors) introduced through representation among the select higher few presented at Basel a most unwelcome feature to the curial mind. The movement as a whole failed, though it registered at Constance the famous decree that the council was superior to the pope and should meet to settle the needs of the church at stated intervals. But even if the papacy emerged from its ordeal strengthened, narrowed and still more centralized, the constitutional doctrines of consent and representation were generalized throughout Europe, and were ready to be used in later times when the excesses of national monarchs produced reaction.

It is interesting and instructive to find Cusanus still cherishing a belief in a united Christendom. It is characteristic of the mediaeval mind that refuses to be disturbed by the discrepancy between idea and fact. For the facts in the middle of the fifteenth century were very different. In Italy communal government had faded into the regime of the signory, in which a single family often had a controlling voice; democracy had passed to oligarchy, and oligarchy was now melting into tyranny. In France Louis XI was behaving as a typical Renaissance despot, centralizing, subduing the fiefs, intriguing against his more mediaeval neighbor Burgundy; Germany was a conglomeration of almost independent electoral and ecclesiastical principalities, their rights sanctioned by the Golden Bull of Charles IV; and in England the house of Tudor, soon to succeed, was ere long to establish the principles of the new monarchy. Everywhere the promise of constitutionalism was failing before despotic control, and the unity of Europe and international government through representatives were no more than a dream. But that vision, which men have recurrently tried to turn into reality, is one of the most permanent legacies of the Middle Ages and, with the true dreams, may prove to have come through the gate of horn.

E. F. JACOB

VI

Renaissance and Reformation

I. In respect of the social sciences, as of all other spheres of knowledge, the keynote of the Middle Ages throughout Christendom had been submission to authority. This submission to authority was the intellectual counterpart to that obedience to authority which had been the dominant principle in every department of mediaeval activity. And the authority which both determined conduct and prescribed creeds was that of the Catholic church. It was the church that fixed the canons of ethics, declared the nature and limit of the Christian man's duty to his neighbor, established and maintained the standards of right and wrong. The church, too, claimed the realm of economics as its own, and not only announced pontifically the conditions under which commerce should be conducted and industry carried on, but also formulated definitively the principles that should decide such questions as whether or not a wage was just, a price equitable or a payment for the use of money in accordance with the Levitical law. Law, moreover, was a prime concern of the ecclesiastical authority. The customs of the nations, the enactments of their rulers and even the venerable civil law of Rome were all inferior in obligation to the canon law based on the divine revelation and developed by the sacred tribunals of the church. As for politics, just as the papal curia in its great days claimed to exercise sovereign power over all Christian kings and princes, so did the doctors of the church formulate the prevailing theory of the state, basing it on the Bible and supplementing the Bible with whatever seemed to them relevant and congruous in the systems of Aristotle, the stoics and the Roman jurists.

The prime characteristic of the period of the Renaissance, on the other hand, was revolt against authority. The emancipated and lawless mind of man began to question the dicta of its ecclesiastical tutors, first, of course, in their own proper sphere of religion, and then, as a consequence, in the sphere of the social sciences over which they had exercised suzerainty. It began to examine the foundations of ethics; to discuss on rationalistic lines the principles of

economics; to analyze critically the nature of law, and weigh the competing claims of the *jus divinum*, *jus naturale*, *jus gentium* and *jus civile*; to develop a political theory which, divorced from religion and free from entanglement with morality, had direct relation to the art of government as practised by the tyrants of the world of practical affairs.

To examine in detail the causes that led to this intellectual liberation does not fall within the scope of this section. They must, however, be indicated briefly; for, unless they are borne in mind, the nature of both the Renaissance and the Reformation will be misunderstood. If we wish to express these causes in impersonal terms we may say that primarily they were the influences emanating from Asia, near and far. If we wish to express them in terms of specific movements we may say that they were the consequences of the crusades and of the Mongol invasions. If we prefer to stress the power of personality in history we may say, without undue exaggeration, that the two main authors of the Renaissance and the Reformation in western Europe were Mohammed and Genghis Khan.

The way for the diffusion of the liberating light of Asia had without doubt been prepared. The barbarians who constituted the peoples of western Christendom had always been rebellious children of the church; although until the time of the crusades their rebellion had been moral and not intellectual. They, in their natural naughtiness and ingrained independence, had resisted the restraining hand of the priesthood, and had all too frequently refused to live up to the lofty ethical standard erected by the saints. Excommunication, interdicts, bulls of deposition—all the weapons of the spiritual armory of the papacy—had been necessary to reduce the sinful obstinacy of the early mediaeval superman. It was, indeed, to no small extent just because the church could not enforce decency of behavior upon the organized brigandage of Europe that she had the happy inspiration to divert and sanctify their predatory and sanguinary passions by directing them to

the recovery of the Holy Land from the infidel.

The crusades, which form the real dividing line of the Middle Ages, had many and far-reaching results. The only one among them, however, that we have to note is this: that they brought the military multitudes of the West into contact with an oriental civilization immeasurably older and finer than their own, and made them conversant with a new world of institutions and ideas. Not a few of the crusaders renounced their former faith, adopted that of Islam and remained permanently as denizens of the East. Many of those who returned to their ancestral homes and retained their allegiance to Christianity came back with an intellectual outlook ineffably enlarged and with an unquenchable tendency to question established creeds. The influence of Asia was manifest in most of the late mediaeval heresies. And the influence of Mohammedan Asia reached Europe not only along the routes of the armies, the ways of the pilgrims and the roads of the merchants who made the Holy Land or Egypt their objective. In two other regions the Crescent and the Cross were in contact for several centuries, a contact, moreover, that was by no means generally hostile. In Sicily, on the one hand, Saracen and Norman—not to mention Greek and Jew—lived side by side in a peaceful polity which fostered the generation of a universal skepticism and the rise of an intensely rationalistic science. In Spain, on the other hand, the Moorish universities became the headquarters of a culture that was based on that of ancient Greece, as transmitted and transmuted through Egyptian, Syrian, Jewish and Arabic channels. Inquisitive Christians, such as Gerbert (later Pope Sylvester II), did not hesitate to risk the salvation of their immortal souls in their desire to learn the mysteries, unknown in the schools of the church, of the higher mathematics and physics, of chemistry and metallurgy and, above all, of the Aristotelian logic and metaphysics. Thus the lore of the Orient quickened the western mind, making it pregnant with new ideas.

The influence of Genghis Khan and of the Mongol invasions of Europe was different in kind. The outstanding fact to be borne in mind is that the empire established by Genghis and maintained by his two successors in the thirteenth century extended from the seaboard of the Pacific in the east to the shores of the Black Sea in the west. Its roads and rivers, admirably patrolled and provided with excellent

hostelries and appropriate vehicles, brought together in mutually profitable union the long sundered civilizations of China and Rome. Now while Rome had gone one way, transforming itself from an empire into a church and developing a culture based upon a creed, China had gone a totally different way, devoting all its talents, in peaceful seclusion, to the perfecting of a culture based upon material comfort. Thus when Rome and China renewed contact in the thirteenth century each was able to contribute much to the other. The great Kublai Khan (A.D. 1260-94) imported Christian missionaries to Peking in order that his people might learn something respecting that spiritual world with which the West had become so conversant. In return his people were able to familiarize the backward denizens of Europe with such powerful agents of progress as the printing press, the mariners' compass and gunpowder.

These three things in particular—printing press, gunpowder and compass—were the material causes of the Renaissance. They brought the mediaeval system to an end. First, the printing press cheaply and easily spread knowledge broadcast among the laity, and broke down that monopoly of learning which the estate of the clergy had enjoyed for a thousand years. Secondly, gunpowder completed the work that had been begun by the bow and the pike; that is to say, it placed weapons of power and precision in the hands of the masses of the third estate, and so destroyed the monopoly of military efficiency which the estate of the European chivalry had enjoyed from the days of the battle of Tours, if not from that of the battle of Adrianople. The armor of the feudal knight became merely an interesting relic of antiquity; while the castle of the noble (a sheer death trap in the days of artillery) was converted into a museum in which to exhibit it. Finally the mariners' compass—especially when supplemented by the quadrant and the chronometer, which were perfected about the same date—made possible for the first time continuous and systematic voyages on the great ocean. Thus it became feasible in the fifteenth century to embark on distant expeditions, and to test those startling ideas of the classical geographers (whose works were early put into print) to the effect that the earth was round and not flat, and that consequently seamen sailing westward across the Atlantic would not reach the perilous margin of the world but

would within reasonable time attain the friendly harbors of India and Cathay.

II. The Renaissance was a composite movement. The outcome of the quickening intercourse of Europe and Asia at the close of the Middle Ages, it displayed many of the characteristics of new and exuberant life. It was, in the first place, the "rebirth of the human spirit"—the resurrection of the mind of man from an intellectual tomb—after a millennium of death and putrefaction. Not that the mediaeval world had failed to make invaluable contributions to the structure of modern civilization. It had made many such contributions, as the preceding section has shown; but they were not intellectual contributions. They were religious, ethical, social and political contributions; not additions to knowledge. For the mind of mediaeval man was entombed, and his spirit wandered ghostlike amid sepulchral superstitions. Such knowledge as he supposed he had acquired was knowledge of a visionary universe that had no existence outside the realm of his own imagination—a realm peopled by fairies and goblins, angels and devils. Science was impossible in a world whose phenomena were regarded as the consequences of incessant and capricious interference on the part of supernatural beings.

That brings us to the second outstanding feature of the Renaissance, viz. the dawn of modern science. The fourteenth and fifteenth centuries were marked by a rapid waning of the sense of the miraculous, and by a corresponding swift increase in the consciousness of the existence of unvarying law. Men began instinctively to seek for rational explanations of events—such as eclipses and earthquakes—which their ancestors had without hesitation ascribed to divine or diabolic interventions. And it was especially in the impressive realm of astronomy that science made its first great conquests and established the evidence of the reign of law. Among astronomical discoveries of the Renaissance era none was equal in sociological importance to that of Copernicus (1473–1543), viz. that the sun is the center of our planetary system and that the earth moves round it once a year. It was a discovery—or rediscovery of a truth known to Aristarchus in the third century B.C.—that was sociologically important for two reasons. First, it shook to its very foundations the mediaeval theological system which was based, beyond possibility of reconstruction,

upon the Ptolemaic principle of a geocentric universe. Secondly, it compelled the thoughtful to contemplate the earth and all human affairs in a new light and in an infinitely reduced perspective. The world shrank to a point in limitless space; the bustle of man's business became inaudible in the immeasurable silences; humanity at length displayed itself in its proper insignificance.

The growth of science and the spread of rationalism constituted in effect a return to the Greek view of life. It was a view in which joy was the most prominent feature, and self-realization the dominant ideal. It contrasted sharply with the mediaeval view, in which the sense of sin filled the scene and asceticism set the standard of virtue. This return to the Greek view was immensely furthered and fostered by that "humanistic" revival which was the third conspicuous feature of the Renaissance. The gradual infiltration of Byzantine copies of the ancient Hellenic classics into Europe by way of south Italy; the renewed study of the Greek language in the academies of Naples, Rome, Florence, Milan and Venice; the printing of the works of Plato and Aristotle, Homer and Hesiod, Aeschylus and Euripides—these were the things that helped to open men's minds, to give rise to crucial questionings, to prepare the way for the reception of science. It was this neopagan outlook upon man, upon nature, and upon God, too, that gave rise to that marvelous manifestation of brilliant art and splendid literature which makes the Renaissance the most fascinating of all the periods of history since the Periclean age of Athens.

The original centers and sources of the Renaissance culture—humanistic, artistic, philosophical, scientific—were the Italian city-states. These cities, and in particular the five mentioned above, had had a continuous existence from the days of republican and imperial Rome, and they had remained pagan to the core. The church had turned temples into cathedrals, and had even transmuted deities into saints, but it had never been able to eradicate the fundamental secularity of the Italian soul. Italy, too, was strewn with relics of classical antiquity. Its language, moreover, was so closely akin to Latin that the study of the Roman writers was an easy matter. The Latin revival begun by Petrarch in the first half of the fourteenth century prepared the way for the entry of Greek under Chrysoloras and his followers at the end of the century. Not only, however, did

continuity with classical times make the Italian city-states the natural leaders in the Renaissance movement; their political independence, their economic wealth, their social organization, all helped to confirm their primacy. The ruin of the mediaeval empire in the thirteenth century, followed by the captivity of the papacy at Avignon in the fourteenth, left them with unequaled opportunities of self-government and civic development in the fifteenth. The growth of their industries in the hands of the municipal guilds; the spread of their commerce under the protection of the state; the increase of their navies and the vast improvements in the art and craft of seamanship which they effected; above all, the evolution of banking and the weaving of the network of international finance—all these things gave their rulers and their leading citizens the power, as well as the will, to patronize artists and sculptors, to build churches and palaces, to found academies, to establish printing presses, to maintain scholars and men of letters.

From Italy the Renaissance spread across the Alps to continental Europe, reaching Germany first. In Germany the signs of the reawakening life and the inquiring mind were rather different from those displayed in Italy. The Christian religion had a stronger hold on the Germans than on the Italians; the solemnity rather than the hilarity of things impressed them. Hence their Renaissant scholars were men like Reuchlin and Melancthon who poured the light of the new learning upon the sacred Scriptures; their representative artists were men like Albrecht Dürer who subdued all his draftsmanship to the inculcation of moral lessons. Nay, the most typical German figure of the time is that of Luther himself, who converted the Renaissance for Germany into the Reformation.

France was hardly affected by the ideas and influences of the new era until after Charles VIII's fateful expedition to Naples in 1494. Janus Lascaris, in fact, during his eight years' sojourn in Paris, may be regarded as its pioneer. Its supreme representative, however, was François Rabelais (1495-1553), and his immortal creations, *Gargantua* and *Pantagruel*, are sufficient to show that in France the Renaissance meant not, as in Italy, the cult of pagan beauty nor, as in Germany, the quest for primitive Christianity, but rather the zest of a life of ribaldry, freed from the bonds of mediaeval reverence and restraint.

England had shown signs of an early Renais-

sance of her own. The poems of Chaucer, for all their mediaeval setting, had been an indication of the dawn of the modern mind. In the opening years of the fifteenth century, too, the zeal of Humphrey of Gloucester in gathering manuscripts, patronizing scholars, embarking on hazardous speculations, had been a clear precursor of the Renaissant spirit. The Wars of the Roses, however, had thrown the country back into mediaeval anarchy and darkness; and when the Tudor rulers gave the country peace and order once again, the course of events revealed the fact that during the interval of obscurity the Renaissance in England had been changed from a movement akin to the Italian to a movement akin to the German. Not men like Humphrey of Gloucester or Tiptoft, Earl of Worcester, but sober reformers and grave scholars, such as Linacre, Colet and More, became its representative figures.

In the Spanish peninsula religion of the mediaeval type remained dominant, and it precluded the entry of either Renaissance or Reformation. Eight centuries (700-1500) of almost uninterrupted crusade had made the maintenance and diffusion of the faith the prime concern of the loftier Spanish minds. This enthusiasm for the Cross, however, although it expelled humanism and depressed art, led to some very remarkable achievements which rank among the greatest and most characteristic of the age. It led to the voyages of discovery. The Portuguese pioneer Prince Henry the Navigator, as during forty years (1420-60) he built his ships, collected his charts, organized his expeditions and sent his seamen forth, was inspired and supported by the hope that he might reach the Christian kingdom of Prester John, might turn the flank of the Turkish Empire and might recover the Holy Land. He did not succeed in his purpose; but he did open up the way which later enabled Diaz to reach the Cape of Good Hope (1486) and Vasco da Gama to open the ocean route to India and the Far East (1498). Similarly Columbus, when on August 3, 1492, he set forth from Palos on his first great westward voyage, did so *in nomine D.N. Jesu Christi*, and went in order that he might open up the Indies and Cathay not only to the commerce of Europe but also to the missionaries of Catholic Christendom; and when the New World was discovered and the strange realms of the Aztecs and the Incas were reduced, the extirpation of heathendom and the imposition of the yoke of the church became the

prime preoccupation of the Spanish conquerors.

The discovery of the New World, like the Copernican discovery of the universe, had a profound and even more direct influence upon the social sciences. On the one hand it enlarged the spheres of both politics and commerce, giving rise to wholly unprecedented problems of property and power. On the other hand it prompted anxious questions by revealing to the speculation of the Old World religions wholly alien from both Crescent and Cross; systems of government profoundly different from any contemplated by either Aristotle or Augustine; codes of ethics in some respects superior to those of Christendom and yet totally unconnected with any of the codes current in Europe; social organizations obviously of immemorial antiquity and of intricate elaboration, nevertheless strikingly different from any modes of organization ever known on either the eastern shores of the Atlantic or the western shores of the Pacific; economic institutions curious in their naïveté but fascinating in their patent purpose to secure rational justice. It is deplorable that the investigation of these ancient aboriginal civilizations of the newly discovered America fell into the hands of a people so ignorant, so incurious, so bigoted, as the Spanish companions of Cortez and Pizarro. The fragments of information they have transmitted to us make us long for more. They told enough, however, to their contemporaries to quicken their imaginations and to set them dreaming of Utopias, Oceanas, New Atlantises, wherein politics preferable to those of a decadent Christendom prevailed. Above all, they gave new vitality and enlarged content to the old stoic conception of a state of nature superior to that of civilization; of a law of nature higher than the enactments of men; of a natural religion, simple and universal, underlying the creeds of all the churches and cults; and of a natural man, free and unsophisticated, who in primitive innocence lived the ideal life in the earthly paradise. The "noble savage" was the denizen of lands unknown before the days of Columbus; and the *Etre Suprême* of the deists of the age of reason rose into existence among the palm clad coral islands first seen by Magellan.

III. The impact of new ideas, the spread of new inventions, the revelations of the new astronomy, the discoveries of the new geography, the opening up of the new commerce—all these strange perturbing novelties displayed

themselves in a Christendom that was already in process of rapid and revolutionary change. The feature which, above all others in the sphere of political institutions, marks the period of transition from mediaeval to modern times, is the disintegration of the *res publica Christiana* and the substitution of the system of national states; that is to say, the dissolution of an ideal unity based on religion—a single Christian community governed under God by two joint rulers, viz. the Holy Roman pope and the Holy Roman emperor—and the establishment in its place of a number of fragmentary states each under its national monarch who tended to claim unlimited authority over all persons and in all causes, whether temporal or spiritual. This tremendous change was immensely accelerated by the many movements, just surveyed, which made up the Renaissance. On the one side the free thought of the Renaissance challenged the validity of the whole system of mediaeval orthodoxy, sapping the very foundations of the papal authority. On the other side the exploitation of the New World, the appropriation of the new trade routes and the conquest of the new commerce, were tasks beyond the competence of any power less imposing and less well organized for war than whole nations, led by belligerent monarchs and supported by all the resources of the militant state.

In other words, the struggle for colonies and for commerce which the geographical discoveries of Columbus, Vasco da Gama and Magellan inaugurated conduced to the establishment of absolute monarchies, supported by the dogma of the divine right of kings, and so put a stop to several most interesting and important movements in the direction of democracy and representative government which the thirteenth and fourteenth centuries had manifested. In England the Parliament under Edward III, and still more under the three kings of the house of Lancaster, had steadily advanced toward control over the executive. In France the feudal nobles, the communes, the *parlements*, the provinces had all made strong claims for autonomy. In Germany and the Netherlands the revived study and general reception of the Roman law had generated the idea of self-governing corporations administering their own affairs by an inherent right not in any way derived from the state; and this fruitful idea of group sovereignty had been eagerly welcomed by all sorts of corporate bodies, civil and

ecclesiastical, municipal and industrial, philanthropic and educational, that had coveted independence of alien control. The political speculations of mediaeval thinkers like John of Salisbury, St. Thomas Aquinas and Aegidius Romanus had strongly tended toward the limitation of royal power and the establishment of constitutional government regulated by the church.

The late mediaeval classification of law into *jus divinum*, *jus naturale*, *jus gentium* and *jus civile* had assisted the cause of the opponents of absolutism by placing the mere enactments of the secular ruler in the lowest category of obligatory commands. Even the humanistic revival in its early stages had tended in the same democratic direction. For the *Politics* of Aristotle had made familiar the idea of a state in which the citizens had held complete authority; while the story of the Roman Republic, as told by Livy, was full of the records of fights for freedom and the expulsion of tyrants.

But, as Herbert Spencer has so conclusively demonstrated, the development of free institutions is dependent on the maintenance of peace and on the organization of society for industrial ends. The intense militancy of this transitional age, which saw the disruption of mediaeval Christendom and the struggle for overseas dominion, was such as to throw back for a couple of centuries the movement toward popular government, and in the meantime to make the autocracy of warlike monarchs inevitable. The men of the West, in their passion for power and their lust for wealth, ceased in the main to feel any concern for either sanctity in religion or freedom in politics. The principle of nationality became rampant. The old bonds which had held together the clergy of Christendom in a common church, the monks and friars in cosmopolitan orders, the knighthood of Europe in a fraternity of chivalry, the scholars of all universities in curricula always the same and a language everywhere Latin—all these mediaeval bonds were broken, and the people of the several countries of the continent (French, Spanish, Portuguese and so on) regrouped themselves as nations for purposes of commerce, colonization and war. The old "estates of the realm" forgot their former quarrels as they combined for aggression or defense. Vernacular languages supplanted the Latin which had for long been the universal vehicle of culture, and the French which had made itself the tongue of chivalry. Even the church, which stood, above

all things, for the fatherhood of God and the brotherhood of man, tended to split itself up into national sections that, even where they did not become definitely heretical, became decidedly schismatic. Catholicism in Spain and Gallicanism in France were at times hardly less resistant to Roman authority than Lutheranism in Germany and Anglicanism in Britain.

Nationality is fundamentally a psychological phenomenon. England was the country in which it first realized itself. Edward I's determination to unite the island of Great Britain by subjugating Wales and Scotland made an irresistible appeal to the patriotic passions of all classes of his subjects, welding them together for aggressive war. Still more did the struggle with the French that broke out in Edward III's day—the Hundred Years' War—caused, as it was, not so much by dynastic claims as by the clash of rival maritime and commercial interests, join all the orders of the people together to maintain English prestige and vindicate national honor. Such discordant factors as remained in England at the close of the Hundred Years' War—e.g. feudal nobles and ultramontane clergy—were so weakened by the subsequent Wars of the Roses that it was easy for the Tudor monarchs to eliminate them and to lead the whole "commonwealth of this realm of England" on patriotic adventure. The establishment of the Tudors at the end of the fifteenth century, indeed, may well be taken as the event that marks the unification of the English nation. The formation of the French nation, although different in process, was achieved also about the same date. Under Louis XI the centralization of the administration was completed; the feudal nobility reduced to impotence; the royal autocracy assured. Under his son Charles VIII Brittany, the last of the great independent fiefs, was (through the marriage of its duchess to the king) subjected to the authority of the crown. In that same closing decade of the fifteenth century, too, Spain brought to a termination its eight century crusade, when the united forces of Castile and Aragon (long sundered by fratricidal conflicts) joined to reduce Granada, the last stronghold of the Moors in the peninsula.

The almost simultaneous attainment of nationhood by England, France and Spain—to say nothing of Scotland, Scandinavia and the Netherlands—involved a portentous change in the politics of Europe. The achievement of solidarity at home marked the beginning of adventure abroad. Consciousness of power led

to aggressive enterprise. Not only were the high seas and the newly discovered regions of the Americas and the Indies made the scenes of furious conflict between English, Spaniard, French and Dutch, but the regions of old Europe which had not succeeded in attaining unity and order were converted into battle-grounds for contending depredators. In particular, two great countries whose inhabitants, although growingly conscious of nationhood, were unable to secure any sort of effective unification, became the "cockpits of Europe," the fields where alien invaders waged their wars, gathered their plunder and worked their will. These two were Germany and Italy. Concerning the causes that delayed the unification of Germany and of Italy until the nineteenth century this is not the place to speak at length. It is enough to note that the intimate association of Germany with the Holy Roman Empire and of Italy with the papacy held them fast bound to the mediaeval system.

Italy was the first to suffer from her failure to weld her diverse small states into a national monarchy of the new type. At the moment when France, Spain and England were completing their consolidation under strong kings, that is, at the end of the fifteenth century, Italy was divided among five greater powers, viz. Naples and the papal states in the south, Venice and Milan in the north, with Florence holding the balance in between. Commonly Venice and the papacy were allied against Milan and Naples, but commutations and permutations among the microscopic five were so frequent and so bewildering that the study of Italian history during the period of the Renaissance is like the threading of an intricate maze. Moreover never was diplomacy so utterly devoid of scruple as it was at this time in the Italian peninsula; never was war waged with so diabolical an admixture of treachery and cruelty; never were poison and the dagger so freely employed to supplement the lies of the politicians and to redress the failures of the mercenary soldier.

No doubt the Italian intellect was quickened and sharpened by the urgent need for incessant alertness in the midst of this unmitigated struggle for existence. The period of wildest and most confused conflict was precisely the period of the climax of the Renaissance—the period wherein flourished Leonardo da Vinci, Michelangelo, Raphael and their compeers of equally immortal memory. But to the commonalty of

the peninsula it was little satisfaction to know that treasures of art were being accumulated and masterpieces of literature written, when at the same time their fields and vineyards were being trampled down by lawless companies and their homes broken up by unpunishable tyrants. And if the condition of things was almost intolerable when the disturbers of the peace were still limited to persons and powers proper to the peninsula, how much more than intolerable did it become when into the seething cauldron of Italian politics French, Spaniards, Swiss and Germans began to dip their agitating spoons. The expedition of the French king, Charles VIII, to make good his claim to the throne of Naples in 1494, marks the commencement of the serious intervention of foreign powers in Italian affairs. To expel the French from Naples Ferdinand of Aragon, the inheritor of another shadowy right to the Neapolitan crown, sent his invincible Spanish infantry. Then, in the north, Valois and Hapsburg became involved in furious conflict for the duchy of Milan, and alien mercenaries, Swiss on the one hand and German on the other, were brought over the Alpine passes to aid in determining the doubtful issue. So was Italy ravaged from end to end by *condottieri* devoid of honor, and by auxiliaries lustful and merciless. To a patriotic Italian at the beginning of the sixteenth century the political prospect was one of almost unrelieved gloom.

IV. It was at this critical moment in Italian history that Niccolò Machiavelli (1469-1527) began to play his memorable part upon the Florentine stage—a part how strikingly different from that played by Dante (1269-1321) on the same stage just two centuries earlier! Nothing, indeed, can more effectively bring home to the student the completeness of the transformation that marked the transition from mediaeval to modern times than a comparison of the *De Monarchia* of Dante with *The Prince* of Machiavelli. All Dante's great ideas of divine governance, universal empire, perpetual peace, eternal justice and the general reign of law have vanished away, and in place of them has come a *Realpolitik* wholly free from all idealistic elements—a political system concerned solely with current facts, entirely regardless of both the precepts of religion and the dictates of morality, completely engrossed with the art of government to the entire exclusion of all speculation respecting the theory of the state.

The year 1469, which saw the birth of Niccolò Machiavelli, is the year which—because of the fact that it saw the marriage of Ferdinand of Aragon to Isabella of Castile—Major Martin Hume regards as the beginning of modern history. If that view is correct, the year can have given birth to no more representative figure. For Machiavelli was free from any affinity with the Middle Ages. All his mental and moral relations were with that old pagan Rome which lay quiescent but immortal beneath the passing pageant of the papacy. His education, discursive but not deep, was based upon the Latin classics, and he not only learned the language of Cicero and Livy but also caught the spirit of enthusiasm with which they regarded the might and majesty of the great republic wherein they lived and moved and had their being. At the age of twenty-five he witnessed the incursion into Italy of the French under Charles VIII. He was present in Florence when the alien host passed through the city, effecting a revolution in its transit. He saw with satisfaction the overthrow of the Medicean tyranny, and the reestablishment of the republican form of government. It was then (1494) that, as a keen republican, he was called to the service of the city-state and initiated into a public career that lasted for eighteen years.

A deep and all-pervading patriotism is the redeeming feature in Machiavelli's otherwise sinister and repellant personality. The desire to see Florence dominant in Tuscany; the wish to establish Tuscany as the center of a united and consolidated Italy; the passionate zeal to find means by which his country could realize her nationhood, could expel the insolent and predatory foreigners and could make herself feared and respected among the states of Europe—such were the noble ideals which (together with the less exalted ambition for personal advancement) inspired the astute and resourceful Florentine during both the eighteen years of his career as a practical politician and the fifteen subsequent years of his career as a literary man. If they were ideals less sublime and splendid than those of Dante, they were at any rate practicable ideals, which Dante's were not. And if they were practicable ideals, they were at least larger and more statesmanly than were those of the petty tyrants and selfish conspirators whom Machiavelli denounced and decried.

During the strenuous and anxious years of

his continuance in office Machiavelli's prime preoccupation was the military regeneration of his people. The Italians in general, and the Florentines in particular, had during the later Middle Ages become soft and degenerate. Made wealthy by usury and sensitive by art, grown self-conscious by speculation, and utilitarian through decay of faith, they, like the Romans of the later empire, had lost the manlier virtues and had sunk into effeminacy and corruption. Not realizing how deep seated was the canker, and with that excessive trust in institutions which usually characterizes the young reformer, Machiavelli hoped to remedy the evil by discipline and education. After long persuasion he secured from the Florentine signory authority to organize and equip a militia. Setting to work with eager zeal, in the course of laborious years he levied, arrayed and trained a force that looked impressive as it paraded in the piazza. But when in 1512 the acid test of war was applied to it, it vanished into thin air, leaving Florence a prey to the returning tyrants, and Machiavelli himself a prisoner in the hands of his implacable foes.

When, after having suffered imprisonment and torture, he was expelled from his beloved city and condemned to perpetual banishment, he realized that in a world so evil, and amid a generation so decadent, craft would be required to supplement force if ever his ideals were to be attained. Hence he set to work in his place of exile at San Casciano to frame the Italian politician's *vade mecum*—the practical guide which should enable the hoped for maker of Italy to overcome his enemies, expel the foreigners, subjugate the papacy, unify the peninsula and convert the particularists of scores of petty principalities into a simple, self-conscious and self-sufficient Italian nation. There are two versions of this masterly, yet terrible, handbook. They were begun simultaneously in 1513; one, however, was completed the same year; the other, continually toiled at, was still unfinished when Machiavelli died in 1527. The two—entitled respectively *The Prince* and *The Discourses on Livy*—differ from one another considerably in point of form. But in spirit and essence they are the same. And the spirit and essence of both of them is this: that the existence and well-being of the state are matters of so great moment that they must be regarded as ends in themselves to the attainment of which all means whatsoever are justified. In *The Discourses* (bk. iii, ch. xli) he says: "Where the

deliberation is wholly touching the safety of the fatherland there ought to be no consideration of just or unjust, pitiful or cruel, honorable or dishonorable, but rather, all other respect being laid aside, that course ought to be taken which may preserve the life and maintain the liberty thereof." From *The Prince* (ch. xxviii) comes the echo: "Let a prince, therefore, take the surest course he can to maintain his life and state: the means shall always be thought honorable"—and the means to which Machiavelli alludes are the merciless ferocity of the lion and the unscrupulous craftiness of the fox. If we ask why Machiavelli troubled to put his ideas down twice—once at leisurely length in an endless string of comments upon the history of the Roman Republic, and once in a brief but pungent letter of advice to an individual ruler, the answer is that the purposes of the two works were wholly different. *The Discourses* were intended for the generality, and they were as a matter of fact read to a numerous company from time to time in the gardens of Florence; they were intended to prepare the public mind for the setting up of the Italian kingdom, modeled on the Roman Republic, and to inoculate the squeamish against any shock which their consciences might receive from the means employed in its establishment. *The Prince*, on the other hand, was a private and confidential document giving precise instructions of a most secret and intimate nature to the individual superman through whose agency the deliverance and unification of Italy were to be effected. Who was this superman—this hero amid a multitude of poltroons—on whom Machiavelli fixed his hopes? In his early days the great *condottiero* Castruccio Castracani had been the center of his expectation; later, when he was secretary, the brilliant but wholly non-moral Cesare Borgia had appeared likely to be the predestined man; Cesare's death in 1507 had left no one but Giuliano de' Medici to whom the patriotic nationalist could look. Can Machiavelli ever seriously have believed that Giuliano had either the spirit or the ability to carry through the tremendous and terrible program assigned to him—the formation of a native army, the expulsion of the foreigner, the debasement of the papacy, the unification of the peninsula, the establishment of a national state? Probably not. Most likely all that Machiavelli immediately hoped for was his own restoration to office and influence in Florence. Not even this, however, resulted. Giuliano de' Medici died in

1516, and Machiavelli transferred his solicitations to his brother and successor Lorenzo. But to him likewise he appealed in vain. Lorenzo neither recalled him to Florence nor took any steps to realize his political ideal.

Machiavelli's *Prince* had no apparent influence whatsoever during Machiavelli's own lifetime. Five years after his death, however, in 1532, Pope Clement VII, nephew of the two Medici to whom the book had been presented, let it loose upon the world. It is eloquent of the corruption of Renaissance Italy that the Machiavellian politic should not have shocked in any way the papal conscience, and that the publication under papal auspices of a work in which reasons of state take precedence of all the dictates of morality and religion should have caused no surprise in the peninsula. Once published, it spread rapidly. Translated into all the languages of Europe, it became the textbook of tyrants and conspirators. It is difficult to estimate how far it was to be held responsible for such dark deeds as the massacre of St. Bartholomew's Day, 1572. Not less difficult is it to say to what extent the conduct of such typical Machiavellians as Frederick the Great, Napoleon I and III, Bismarck and Cavour was determined by a study of its precepts; possibly the accordance of their conduct with its precepts was a mere coincidence. For the dissociation of politics from ethics has not been a phenomenon peculiar to any one age or any single locality. What makes Machiavelli unique is his open and unashamed avowal of principles which men usually (like Cavour) conceal or (like Frederick) ostentatiously repudiate. His works, with their frank and naïve wickedness, mark as with a flash of sudden revelation the end of the amiable theorizing of the estimable mediaeval ecclesiastics concerning the relations of the two powers, the two lights, the two swords, the two small fishes and the rest of the miscellaneous collection of visionary dualities; and the reunion of the theory and practise of politics in a world of new and militant states.

V. Machiavelli's *Discourses* and *Prince* are not the only works of his enforced and unwelcome leisure that merit notice as evidences of the change passing over the social sciences during the period of the Renaissance. His *Art of War*, remarkable as the first scientific treatise on military tactics, indicates clearly the abandonment of the mediaeval belief that the destinies of nations are in divine hands and are

determined according to the decrees of everlasting justice, and the assumption of the view that they are in the keeping of the nations themselves and are determined by the standards of mere craft and force. In this book, with a curious mixture of wisdom in generalities and folly in particulars, Machiavelli exalts pagan virtue as against Christian humility; a national militia as against hired mercenaries; infantry as against cavalry; and pikes and swords as against those deceptive novelties, firearms! Still more significant sociologically is his *History of Florence*. Utterly unlike both the earlier chronicles, such as that of Villani, and the collections of learned lumber to which such antiquarians as Aretino gave the name of histories, it is concerned wholly with the politics of Machiavelli's own day. Written in Italian and not in Latin, expressed in vivid and unconventional phraseology, it deals mainly with the events of that very recent period 1434-92; and where it treats of the earlier period it does so merely in order to discover the causes of current movements or to illustrate them by analogies and parallels. It piles up examples, for instance, to show how treacherous and untrustworthy mercenary soldiers always have been, and how all decisive victories have been won by native levies. Similarly, greatly daring, it indicates again and again how appalling a disaster has been the assumption of temporal power by the papacy, and how the first step toward the unification of Italy must be the termination of this ecclesiastical usurpation.

The treatment of history as a handmaid to politics, so strikingly illustrated by Machiavelli's *History of Florence*, was characteristic of many other historical writings of the period of the Renaissance and Reformation. History, and particularly ancient history, was seen, on the one hand, to provide a storehouse of precedents and examples infinitely valuable as guides to the conduct of practical affairs. History, and particularly modern history, was recognized, on the other hand, as the indispensable informer respecting the antecedents of the problems of the current day. Hence writers such as Blondus and Guicciardini, on the one side, or Camden and Grotius, on the other, compiled their histories or their annals not in order to provide amusement for the passing hour, nor yet in order to point moral lessons, but in order to supply statesmen with materials for the formation of judgments, and to furnish patriots with weapons for the defense of their country.

The historical works of the Renaissance and Reformation period, since they were of the nature of politicians' handbooks, although they were characterized (in sharp contrast with mediaeval chronicles) by coherence and unity of design, were of course highly partisan in nature and controversial in tone. They aimed at stating a preassumed case or at defending a prejudged cause. They were uncritical in their use of materials, unscientific in their treatment of evidence and wholly unscrupulous in their arguments and conclusions. The patriotic histories, such as those of Machiavelli and Guicciardini, pointed the way; but the theological histories became the great examples of the new mode.

That history should have been one of the main weapons with which the battles of the Reformation were fought is by no means remarkable. For the keynote of the Reformation was "Back to Primitive Christianity," and consequently the issue turned on the historical questions, first, what was primitive Christianity, and, secondly, by what process, whether of development or of corruption, did mediaeval Christianity come to diverge so widely from the primitive model. Hence rival bodies of theologians, such as the Magdeburg Centurionators, on the Protestant side, and the Benedictines of St. Maur, on the Catholic side, gave themselves to the enormous labor of rummaging the lumber rooms of antiquity in order to provide their partisans with offensive missiles or with material for defensive barricades.

But the Reformation was more than a matter of academic controversy between divergent schools of ecclesiastical historians or antagonistic companies of theologians. It was a movement that gathered to itself and incorporated many revolutionary tendencies in the worlds of society and politics for which the time was ripe. Besides being a return to the simplicity of the Gospel and a reaffirmation of the doctrine of justification by faith, it was also a revolt of the laity against clerical tutelage; a rebellion of the individual against authority; a rising of emancipated human reason against tradition and convention; a protest of the national conscience of man against the corruption of the Roman penitential system; an attack of the secular power upon the accumulated wealth of the religious. Further, as it spread from Germany throughout Europe and as the comparatively mild dissidence of Lutheranism was supplemented by the thoroughgoing anti-Catholicism of the Cal-

vinistic organization, the Reformation became involved in one country after another with social and political movements with which it had no natural or necessary affinity. Generally it appealed more to the Teutonic than to the Latin mind; so that it might seem to have been the belated revolt of the barbarian against his Roman master. In many lands it became associated with the cause of national independence, and the association was so complicated that it is difficult to say whether politically the Reformation is to be regarded as the product of the national state, or the national state the product of the Reformation. At any rate nationalism and reform were frequently inextricably interwoven. For example, much of the support which John Knox received in Scotland came from powerful patriots who were determined to cut the fetters that were dragging down their country into subjection to France; similarly Calvinism made headway in Holland as part of the national resistance to the tyranny of Catholic Spain; so, too, did Sweden adopt Lutheranism precisely at the moment when she was shaking herself free of Danish control. Internal politics, moreover, did much to determine the attitude of governments and of large classes of their subjects toward the Reformation movement. In England, for instance, the king took the lead in the revolt against Rome; and he used the religious power of the reformers as a means wherewith to beat down the remnants of the mediaeval nobility, to subjugate and despoil the over-wealthy clergy, and to establish the royal autocracy. In France, on the other hand, the Valois monarchy, whose conflicts with the Hapsburgs in Italy made papal friendship a necessity, set its face against both Luther and Calvin. Hence, by way of reaction, all opponents of kingly power and centralized administration—and in particular the feudal nobility and the semi-sovereign communes—tended to join the company of the Huguenots. And the Huguenots, in the fury of their resistance to the royal authority, did not hesitate to ally themselves to the enemies of France and to mortgage French territories to their country's foes. Hence in France nationalism identified itself with the Counter Reformation, and the cause of Calvinism became not (as in Scotland or Holland) the cause of patriotism but the cause of disloyalty, rebellion and treachery. So, too, in respect of Spain: the mere fact that the Dutch rebels were Calvinists and the English pirates Protestants was enough to make the grandees of

Castile and Aragon fanatical in their zeal to maintain the ascendancy of Rome. Catholicism and empire became synonymous terms.

VI. Since the Reformation had such different political and social affinities in different parts of Europe, and since, moreover, it was marked by a general revolt against authority and by the proclamation of a novel independence of judgment, it is not surprising that in the sphere of sociology it should have given rise to many and diverse varieties of speculation and theory. At one end of the scale the old problem of the relations of church and state assumed new forms and met with strange solutions, discussion finally centering round the question of the limits of religious toleration. One thing, at any rate, was made clear in the course of the controversy, and that was that the ideal *res publica Christiana* of the Middle Ages had been irremediably shattered and that the two societies, secular and sacred, stood forth as separate and naturally antagonistic entities. At the other end of the scale the long quiescent question of the relations of the individual to society began to be raised in many acute forms. Not only did heretics and antinomians claim entire freedom of faith and complete emancipation from external restraints; but radicals and communists in infinite variety of fantasy challenged the whole social and economic order, and formulated grandiose schemes for the reorganization of heaven and earth.

Martin Luther, the pioneer reformer, more of a moralist than a theologian and more of a German than either, was the first who had to face the problems created by the disruption of Christendom. The position of antagonism to both papacy and empire which, with prodigious courage, he assumed in 1521, was one of a peril so extreme that only a few years earlier no one occupying it could have hoped to escape fiery destruction. His only chance of safety and survival resided in the possibility of the support of the German nation as against the dominance of the Roman curia, and the support of the princes of the empire as against the alien Charles v who, although a foreigner, half Fleming and half Spaniard, had just been elevated to the imperial throne. His politics therefore were, on the one hand, intensely nationalistic and, on the other hand, intensely monarchic. He made his appeal in the German language to the Christian nobility of the German nation; its insistent note was emancipation from

the Latin yoke. He exalted the power of the prince, deriving it from God, and asserted, in language borrowed from St. Paul, the duty of all subjects to obey. He glorified the state as the supreme authority in all causes whether secular or sacred, thus preparing the Teutonic mind for the reception, three centuries later, of the *étatiste* doctrines of Hegel and Treitschke. Nevertheless he had to make some concession to relativity in his absolutism. He could not forget that the monarch whose divine prerogative he exalted might be a persecuting Catholic, like Charles v in Spain. He therefore had to impose limits both on the authority of the ruler and on the submission of the subject. He found much difficulty in framing an exception to the general rule of passive obedience which should not itself become a general rule of active disobedience. Finally, with much hesitation and vagueness, he admitted that if a monarch violates the divine law he forfeits the claim to command the submission of his subjects. This reluctant but inevitable admission was enough for the antinomian rebels of the day, to each one of whom the divine law was a matter of direct personal revelation. In revolts that set all the restraints of religion and morality at defiance they reduced large tracts of Germany to chaos. Hence, in order to save his nation from ruin and his religious organization from hopeless discredit, Luther had to insist that the authority of a pious Protestant prince was unlimited, and to call upon all the pious Protestant princes of his communion to suppress the peasants' risings.

Philip Melancthon, Luther's great disciple and colleague, pondered politics from a loftier and less opportunist point of view than his leader. He was a man of profounder scholarship than Luther, and of more philosophic mind; moreover he was less perturbed by the urgent need to solve the practical problems of the hour. Not without justice has he been called the Protestant Aquinas. Drawing upon an extensive knowledge of the scholastic philosophy, the canon and civil laws, the politics of Aristotle and the ethics of the New Testament, he made a serious attempt to frame a coherent system of social doctrine applicable to the new ecclesiastical condition of things. The basis of his system is the sovereignty of law, primarily, of course, the divine law, the directly revealed will of God; but, secondarily, the law of nature, the unrevealed law of God, written upon the conscience of every man born into the world. By reference to this supreme and authoritative

double code of law Melancthon defends the institution of government and maintains the right of princes to rule. He contends that the principal purpose of secular administration is the establishment of peace and the provision of conditions in which true religion may flourish. He insists that so long as the state is duly performing its divinely appointed functions, all its subjects are bound to obey its commands. He refrains from discussing what ought to happen if the state should exceed or fall short of its duty, and if it should violate the precepts of the divine legislator. But by implication he says the same as Luther, viz. that in the last resort Christians must obey God rather than man, and consequently that the right and duty of resistance exist. No reformer could possibly avoid sanctioning rebellion in some degree or other. In the endeavor to do so most of them suffered agonies.

Ulrich Zwingli was a much less conspicuous reformer than either Luther or Melancthon. His stormy career, which centred in Zurich, was cut short by death in battle (1531) when he was but forty-seven years old. In so far as the eight volumes of his works contain any meanderings from the straight paths of theology into the mazes of politics, they show that in an interesting and significant way he reverted to the mediaeval ideal of the *res publica Christiana*, that is to say, to the ideal of a single society—church on its spiritual side, state on its temporal side—in which the whole community is joined together. But it was a reversion with a difference. It was no longer a Holy Roman Empire comprising an undivided Christendom in its scope but merely the city and canton of Zurich wherein Zwingli himself exercised the combined ecclesiastical and secular authority. Within the limits of this small reformed Christian community he claimed absolute and universal authority, and he insisted on the duty of passive obedience from his subjects.

For a short time Zwinglianism planted itself in the city of Geneva. The Zwinglian principle of religious autonomy and political independence commended itself to the citizens of that aspiring commune in their struggle to retain their freedom as against the dukes of Savoy and other formidable foes. Soon, however, Zwinglianism was supplanted by another type of reformed religion still more potent as an organ of militant independence. In 1536 John Calvin, fleeing from persecution in France, made his way to the fair city on Lake Lemán; in 1541,

after striking vicissitudes of fortune, he established an ascendancy there that endured until his death in 1564. The political principles of Calvinism, as set forth with admirable precision in the closing sections of *The Institutes*, are theocratic and republican. Their foundation is the universal sovereignty of the divine will. The superiority of the spiritual authority over the temporal authority is asserted with as much emphasis as ever it had been asserted by Pope Boniface VIII in his famous bull, *Unam sanctam*. Nevertheless the secular government is necessary as the agent of the ecclesiastical, and within its own proper sphere it is equally of divine institution. Its function is to enforce the decision of the elders of the church, to maintain the cause of the reformed religion, to secure external and internal tranquillity. Its form, like that of the presbytery, should be republican: it should consist of the aristocracy of saints. The duty of the rank and file of the elect is passive obedience. But even Calvin, although with obvious unwillingness, is compelled at the very end of his discourse to admit the fatal exception. What if the secular authority, forgetting its duty to its spiritual superior, prove naughty and recalcitrant? In two cases Calvin allows that it may be, and indeed must be, resisted. First, if it be "tyrannical" it may be opposed in due constitutional form by the ephors; secondly, if it be "wicked" it must be met by the general resistance of the whole community. Since the question as to what constitutes "wickedness" is left to the judgment of the individual believer, it is clear that a breach is made in the dyke of authority sufficiently large to admit all the flood of rebellion. For the faithful Calvinist, whenever he found himself in either a Catholic or a Protestant state, tended to identify "wickedness" with refusal on the part of the government to accept the full presbyterian system. Hence Calvinism, for all Calvin's precautions, became the creed of rebels.

VII. For some quarter of a century (1520-45) the Reformation in its various manifestations—Lutheran, Zwinglian, Calvinistic, Anglican—carried all before it. The Catholic church, because of its failure to correct the abuses which had corrupted it in the later Middle Ages, had lost its hold on the conscience of Christendom. Toward the close of Luther's life (1546) it seemed probable that not only in Teutonic countries, but even in France, Spain and Italy itself, Catholicism would be swept away alto-

gether. In these desperate circumstances, however, the menaced church recovered itself, carried through the long needed reforms and under a series of new popes, very different from the depraved worldlings who had held the papal chair during the Renaissance, stemmed the tide of disaster. New religious orders, in particular that of the Jesuits (1534), organized themselves to combat the new heresies; the Index was instituted to regulate the reading of the faithful; the Inquisition was directed to the extirpation of the unfaithful; the doctrines of the church were formulated with a new precision, as against the new sectaries, by the Council of Trent (1563).

The Catholic recovery began; and before the close of the sixteenth century one-half of Christendom was securely regained. Not without strenuous resistance, however, did the reformers surrender their conquests, and for nearly ninety years (1559-1648) Europe was torn by religious wars marked by a sanguinary ferocity unknown in earlier conflicts. The persecutions of Alva in the Netherlands (1567-73); the massacre of St. Bartholomew's Day in France (1572); above all, the long protracted atrocities of the Thirty Years' War in Germany (1618-48) necessitated not only the establishment of a state sovereignty strong enough to curb the fury of the religious fanatics but also the reconsideration of political theory, the formulation of a principle of toleration and the institution of international law. We can do no more than glance at some of the lines taken by the thought of this disturbed but energetic age.

The first doctrine to be developed was that of the right of resistance to tyrants—a tyrant being any ruler who did not support the resister's form of religion. It was a doctrine urgently needed both by Protestant subjects of such monarchs as Philip II of Spain, Mary of England or Charles IX of France, and by Catholic subjects of such monarchs as Henry VIII of England, Henry III of France or William of Orange. It was developed by a number of thinkers on both the Protestant and the Catholic sides. Of the Calvinistic statements of the case by far the most effective is that of the *Vindiciae contra tyrannos* (1579), formerly attributed to Hubert Languet but now generally assigned to Philippe Duplessis-Mornay. It boldly advances, on the basis of Old Testament history, Roman law and feudal principle, the contractual theory of the source of political obligation; contends that sovereignty originates in and continues to

reside in the people; and argues that kings, who are mere executive agents, can properly be removed if, whether by tyranny or by wickedness, they break their engagements.

On the Catholic side the principal formulators of the theory of the right of rebellion were the Jesuits. To the horror of a good many Catholics of the old school they frankly abandoned the politics of St. Thomas Aquinas and treated the state as a purely human (if not diabolic) institution, having no claim whatsoever either to challenge or to share the divine authority of the church. The greatest and most lucid of the Jesuit publicists, Juan de Mariana, in developing this idea in his *De rege et regis institutione* (1599) formulated a political philosophy strikingly similar to that which half a century later Thomas Hobbes elaborated in his *Leviathan*—using it, however, for the exaltation of the ecclesiastical and not of the secular power. He pictures a state of nature, subsequent to the fall of man, thoroughly evil, in which everyone's hand is against that of his neighbor; he describes the emergence of society from this condition of primitive chaos by means of a contract; he supposes a ruler to be chosen by the newly constituted people, and he depicts him as placed in an authority which is strictly limited by the terms of his appointment. If he breaks his engagement, whether through tyranny (that is, violation of the constitution) or through wickedness (that is, departure from the true faith) he can properly be removed, either openly by formal deposition or, if this fails, by assassination.

It was the sanction of assassination by the grave fathers of the church, both Catholic and Calvinistic, that constituted one of the worst horrors of this dreadful period of the wars of religion. Rulers in every country where the conflict between the new faith and the old was waged were subjected to the paralyzing peril of sudden death at the hands of pious fanatics who were assured by their spiritual chiefs that they were doing God service in removing tyrants. William of Orange in Holland had survived five attempts upon his life before he succumbed to the pistol of Balthasar Gerard in 1584; Elizabeth of England informed a French ambassador that, thanks to Burleigh's vigilance, no fewer than fifteen plots to compass her death had been frustrated; Henry IV of France escaped nineteen would-be assassins before he fell beneath the knife of the twentieth, the devout Ravaillac, in 1610.

The dominance of the doctrine of rebellion and tyrannicide in the political theory of the late sixteenth century, coupled with the universality of civil wars and the persistence of assassination plots, caused both practical statesmen and patriotic thinkers to ponder means whereby fanaticism could be restrained and order restored. The men of affairs had to seek modes of religious compromise and methods for restoring strong monarchical governments. The theorists had to try to discover some workable principle of toleration and some valid arguments for monarchical authority. We are not now concerned with the history of the process whereby—e.g. in France by the Edict of Nantes (1598) and the strong rule of Richelieu, (1624-42)—religious strife was quelled throughout Europe and order reestablished. Our attention must be concentrated on the speculative writings whereby the return to sanity and security was fostered.

Foremost among the champions of good government and the advocates of religious toleration was Jean Bodin (1530-96), one of the ablest Frenchmen of his day, a faithful servant in turn of the renegade Catholic Henry III and the renegade Huguenot Henry IV. In an age of religious fanaticism he was eminent for indifference and ambiguity. What his own opinions were it is impossible even now to determine. Mercier assures us that he was a Catholic; De Thou claims him as a Huguenot, and it is certain that as such he was marked down for extermination in August, 1572, escaping the fate of Coligny only by the lucky chance that a window was open and that he himself was agile and daring. Patin says that he was a Jew and so lends support to a tradition, recorded by Monsieur Chapellain, that on his mother's side he was descended from a family of Spanish Israelites driven from the peninsula by the persecution of 1496. Bayle characterized his religion as "amphibious," while Gillot, who had known him, denied (in a letter to Scaliger, 1607) that he had any religion at all, concluding with the words: "Il mourut comme un chien, *sine ullo sensu pietatis*, n'étant ni juif, ni chrétien, ni turc." These are high encomiums for the period to which they relate: a few more of such amphibians would have been all the better for the peace of the world. Even as things were, his influence was great and beneficial. For he was the guide and counselor of the party of the *politiques* who in France secured some sort of toleration by the issue of

the Edict of Nantes (1598), and some sort of order by the establishment of the Bourbon monarchy. His two most notable works from our point of view are, first, his *Heptaplomeres* (circulated in manuscript and never yet fully printed) and, secondly, his *Republic* (published in French in 1576 and in a revised Latin version in 1586). The *Heptaplomeres*—whose curious title no one has been able to explain—is in form a discussion, free and passionless, between seven men representative respectively of the tenets of Catholicism, Lutheranism, Zwinglianism, Judaism, Mohammedanism, atheism and neo-Platonic mysticism. The outcome of the protracted but amiable debate—of which the honors are shared between the Jew and the neo-Platonist—is that absolute truth is unattainable and that the only practicable policy is therefore that each should hold his own view and tolerate that of his neighbor. The book ends with the noble words attributed by Cassiodorus to Theodoric the Ostrogoth: “Religionem imperare non possumus, quia nemo cogitur ut credat invitum.”

This same principle of lofty tolerance is quoted again by Bodin in his *Republic* (bk. iv, ch. vii), but the object of that great work is far larger and more comprehensive than the mere advocacy of a liberal religious policy. The *Republic* is an immense treatise, comprising in its twelve hundred and twenty-one octavo pages well over a quarter of a million words. It is the most complete and systematic treatment of the whole field of political and social speculation written since the days of Aristotle. Of its six books the first treats of the family and the state. The family is the basis of the state, and groups of associated families form the material out of which it is constituted. And yet it is not constituted by consent out of the voluntary co-operation of these groups but by force because of their conflicts with each other. Force is the essence of that sovereignty which is the distinctive mark of the state: “Majestas est summa in cives ac subditos legibusque soluta potestas.” Book II is less controversial; it distinguishes, in a way which later political theorists (e.g. Hobbes) would have done well to remember, between state and government, describes the three possible forms of state (monarchic, aristocratic, democratic) and indicates the innumerable varieties of forms of government. Book III is dull and technical: it discusses at dreary length the different types of legislative assemblies, executive magistratures and judicial

courts; treats of the various *sodalitia* (colleges, communes, corporations) within the state, and contends that all are subordinate to the sovereign political authority; expounds the rights and duties of citizenship. Book IV follows closely the lead of Aristotle in considering the causes of revolution and in seeking to discover the secret of the fall of states. It goes beyond Aristotle, however, in arguing that by means of astrology the fate of kingdoms and empires can be foreseen. If Book IV follows Aristotle, Book V in a most interesting way anticipates Montesquieu. It is a pioneer study of the influence of geographical conditions in general, and climate in particular, upon political and social institutions. It distinguishes three primary climatic regions—the frigid north, the torrid south and the temperate middle region—and it discusses with a wealth of learned illustration the features peculiar to each and the institutions appropriate thereto. Nothing could have been a clearer indication of the doctrine of political and even religious relativity. No form of state or government, no sort of ecclesiastical organization, has any absolute validity. All is dependent on time and circumstance. After this remarkable utterance Book VI comes as an anticlimax. Apart from a rather novel treatment of public finance, it is merely an omnium-gatherum comprising miscellaneous odds and ends too important to be left out altogether but not sufficiently relevant to the main themes of the book to have been included hitherto.

VIII. Bodin's *Republic* was a seminal work full of original and striking ideas. Its main tendency was the exaltation of the state over the church, the assertion of the almost unrestricted sovereignty of the secular ruler and the advocacy of the principle of religious toleration in the interests of peace. Bodin's doctrines, of course, did not please everyone. Both zealous Calvinists and devout Catholics objected to his secularity and to his debasement of the spiritual power. His conception of religious toleration appeared to most of the persecutors and would-be persecutors of the day as a weak and wicked surrender to the devil. Even those who agreed with his doctrine of state sovereignty, his advocacy of the subjection of corporations to the central power, his commendation of monarchy and his condemnation of regicide, were often dissatisfied with the way in which he treated the state as having no other sanction than force, and the king as

possessing no higher sacredness than utility. They felt that a religious basis was needed for the state if it were to maintain itself against the sectaries, and that only if kings were hedged in by divinity could they hope to escape the diabolical weapons of the assassins.

Prominent among these theological defenders of monarchy was William Barclay (1546-1608), a Scottish Catholic who, having gone to France as a youth to study law, remained there as a professor and public servant. In his most notable work, *De regno et regali potestate* (1600), he argued (against Bodin) that royal authority was not derived from conquest or based on force, and (against the Calvinists and Jesuits) that it was not a mere matter of contract. On the contrary, he maintained that kings were the representatives of God and that they derived their authority from heaven. On this ground he taught the duties of passive obedience and active support on the part of subjects, and condemned the prevailing practice of regicide as being as obnoxious to the King of Heaven as it was inconvenient to the kings of earth.

The doctrine of divine right thus enunciated was not a novelty among men. It had many antecedents in the sacred books of the East. It was clearly foreshadowed both in the practise of the Old Testament and in the precepts of the New. It had been developed by the supporters of the mediaeval emperors in their controversies with the supporters of the mediaeval popes. The emperor, they contended, derived his dignity direct from the Deity and not mediately through the papacy. It had been adopted and adapted by such national kings as Philip IV of France and Edward III of England when circumstances brought them into conflict with the ecclesiastical power. It derived a new importance after the Reformation when bulls of excommunication and deposition began to be directed from the papal curia against heretical and schismatic rulers. Still further was its value enhanced when Jesuits like Mariana and Calvinists like George Buchanan, commenced to formulate the contract theory of the relation between monarchs and their subjects, with the appendant dogmas of the contingent rights of rebellion and tyrannicide.

At the end of the sixteenth century two kings of the front rank were ruling in spite of the strenuous antagonism of the papacy—Henry IV in France and James I in England and Scotland. They and their defenders asserted, as against the papal claims to absolve their sub-

jects from the bonds of allegiance, not only the divine right of kings but further their divine hereditary right. They emphasized the patriarchal principle of primogeniture as the sole mode by means of which the sacred authority to govern was transmitted. Henry IV was content to let William Barclay speak and write on his behalf; but James I, proud of his pedantic learning, himself took pen in hand and, in order to exalt his royal prerogative, produced a series of works, of which the *True Law of Free Monarchies* (1598) is the most considerable. He found the dogma of the divine hereditary right of monarchy a potent instrument of defense against very varied foes. It protected him against popes who claimed power to depose him; against parliaments which professed to restrict him; against presbyteries which pretended to regard him as their agent and "God's silly vassal"; against Puritans who proposed to assassinate him. Later statements of the divine right doctrine were made in England by Sir Robert Filmer and in France by the courtly Bossuet.

IX. The problems dealt with by Bodin and by Barclay, by Mariana and by James I, were problems of internal government. The principles of their solution were sought in scripture, in history, in Greek philosophy and in Roman law. Besides these domestic problems, however, the new age brought up for consideration problems of a wholly novel character in the realm of international and interracial relations. The discovery of America; the establishment of colonial empires by Spaniards, Portuguese, Dutch and English; the founding of factories in India; the development of intercontinental commerce; the subjugation of non-Christian peoples—all these phenomena of the new world of sovereign national states gave rise to urgent questions in the sphere of ethics, economics, politics and law.

It was useless to appeal to the old authorities for the settlement of these new problems. For, on the one hand, their utterances were irrelevant and, on the other hand, they were not recognized as authoritative. On issues that divided Protestants from Catholics it was vain to cite the decisions of popes and councils; on issues that concerned both Christians and non-Christians it was no good to appeal either to the Scriptures or the early fathers. What was needed was some recognized norm of conduct that would be recognized as binding on man,

merely as man, all the world over and in every age. This norm was supplied by the great Dutch thinker Hugo Grotius (1583-1645) in the law of nature with its supplementary law of nations.

The conception of the *lex naturalis*, or *jus naturale*, was as old as the stoic philosophy. It was recognized by St. Paul (*Romans* II. 14); it was developed by the mediaeval schoolmen; it was incorporated by St. Thomas Aquinas in his famous fourfold classification of laws. In Christian theology the "law of nature" was regarded as the unrevealed law of God, implanted in the consciences of men—part of the light that lighteth every man that cometh into the world. The great Jesuit jurists of the sixteenth and seventeenth centuries—Mariana, Suarez, Bellarmine and the rest—adopted and developed the Thomist view. Now this conception of the law of nature as the unrevealed law of God—the mere appendix to the law revealed in the Scriptures and expanded in the canons of the church—was worse than useless to the international jurists. They needed a code that would be recognized as binding by Jews, Turks, infidels and even by South Sea savages. Grotius, therefore, although a sincerely pious man (of the Arminian persuasion), snatched the law of nature from the possession of the theologians and rationalized it, making it universal. It was, he said, the product of human reason: "*Jus naturale est dictatum rectae rationis.*" This was a revolutionary utterance, and it excited the fiercest antagonism of the despoiled divines. But it was so vitally important as laying the foundation of modern international law that the jurists maintained their possession against all the theological attempts at recovery.

In the Roman jurisprudence the *jus naturale* had been intimately associated with the *jus gentium*, i.e. the law of nature with the law of nations. Some of the great Roman lawyers, in fact, had gone so far as to identify the two, contending that the *jus naturale* is merely the abstract and philosophical presentation of the concrete and practical *jura gentium*. Grotius found this close association extremely serviceable to his purpose. Having appropriated the *jus naturale* as a principle of international morality, he adopted the *jus gentium* as a code of international custom. It provided him with countless invaluable rules concerning such difficult questions as the modes of acquiring property and the means of discharging obligations. It has been much debated whether or not he

was aware that he was taking a system of private law and converting it into a system of public law. Certainly he effected the great transmutation without drawing attention to it. But he was no fool, and it is best to assume that he knew what he was about.

His sense of the need of an authoritative body of international law independent of theology had been quickened by three great conflicts with which in his official capacity he had had to do. First, in the East Indies, the Dutch and the Portuguese had become involved in a furious struggle for markets and trading stations, in which no common standard of right had been recognized (1604). Secondly, in the North Sea and the English Channel, English and Dutch seamen had developed a fierce rivalry, the one contending that these waters were their exclusive property, the other maintaining the freedom of the ocean (1609). Finally the Thirty Years' War (1618-48), with its unprecedented tale of horrors and atrocities, brought home to Grotius the urgency of the demand for some laws of war and peace which both Protestants and Catholics, both Christians and infidels, would accept as restraints upon unmitigated barbarity.

In these circumstances he wrote his great book *De jure belli ac pacis* (1625). Compiled in exile in France, it is dedicated to Louis XIII. It contains prolegomena treating in general terms of the state and of law—a treatise of the highest interest and importance to students of political ideas. Then it proceeds (bk. i) to argue the question whether or not war is ever just, coming most emphatically to a positive conclusion. Next (bk. ii) it proceeds to enumerate and examine the just causes of war. Finally (bk. iii) Grotius lays down, on the basis of the *jus naturale* and the *jus gentium*, detailed rules for obviating the outbreak of war and for mitigating its abominations when once it has become kindled.

Few books have had a more powerful or a more beneficent influence upon the conduct of human affairs. All through the seventeenth, eighteenth and nineteenth centuries it operated to limit the scope of hostilities, to ban atrocities and to extend the humanities in war.

X. The ferment in men's minds caused by the Renaissance and the Reformation, by the new astronomy and the new geography, by the revival of humanism and the return to primitive Christianity, by the spread of science and the

growth of a vernacular literature—by all the countless influences that molded this great transitional age—caused an immense effervescence of new social and economic ideas. Moreover social and economic conditions changed with inconceivable rapidity, and soon the orderly and regulated mediaeval world broke up into a chaos of conflicting individualities. Industry left the old towns with their strictly organized guilds, their sternly enforced customs, their antiquated and inefficient modes of production, and located itself in new regions where economic freedom could prevail. Similarly, and particularly after the devastations of the Black Death, the venerable agricultural estates of the great secular and ecclesiastical lords sank into bankruptcy. Under the obsolete modes of mediaeval cultivation the fields ceased to yield crops, the exhausted pastures refused to rear flocks and herds, the vineyards failed, and the remnants of the rural population languished into destitution and misery. Then came the Reformation with its widespread confiscation of church property, followed by closing of hospitals, enclosure of common lands, expulsion of peasantry, and in general a thorough if unobtrusive social revolution. On the top of all this was superimposed the discovery of the Midas wealth of the New World—the fabulous hoards of the gold of the Incas and the Aztecs, the inexhaustible silver mines of Potosi. These barren metals, which themselves could feed no one and clothe no one, were nevertheless by the misguided economists (or bullionists) of the day regarded as the sole sort of wealth that mattered, if not veritably and exclusively wealth itself. Hence gold and silver, instead of being used freely in the arts, and instead of being allowed to circulate easily as lubricants of commerce, were hoarded and stored, protected and monopolized to the utter disorganization of the world of business. The net result of the influx of the precious metals, however, and of the regulations imposed upon their circulation, was a steady and rapid rise of prices which, because it completely outstripped the hesitant and reluctant rise of wages that should have accompanied it, caused the further depression of the already suffering working classes.

The immediate consequences of the unparalleled miseries of the time, which no one could intelligently explain, were widespread and terrible revolts of the unhappy peasantry and artisans. Those of Germany were the most notable and characteristic. As far back as 1438 a

secretly circulated manifesto, the *Reformatio Sigismundi*, voiced the dissatisfaction of the rustics, demanding abolition of serfdom, restitution of forests and pasture lands, and the like. Fifty years later organization of the peasantry for action began in the formation of a *Bundschuh*, or union of the oppressed. In 1514 the poor of both town and country, especially in Württemberg, formed a militant association named quaintly *Der arme Konrad*. Not, however, until 1524, when the Lutheran upheaval was in full course, did the wretched proletariat intervene in the mêlée with their “twelve articles” and their declaration of war upon the lords. The revolt was, of course, suppressed with considerable severity, Luther aiding the secular authority by his denunciation of the sin of rebellion.

In every great period of social and economic advance, however much in the long run it may tend to the increase of the general happiness, at the moment the impoverished and unprogressive multitude suffer. And in this period of the Renaissance and the Reformation, when the communal conscience was not sensitive and when the machinery for the relief of destitution was undreamed of, the distresses of the commonalty were severe. The governments of the day, themselves by no means stable and secure, menaced by the attacks of numerous foes, the prey to ignorance and terror, could do nothing but suppress the risings of the miserable mobs which, indeed, were always marked by appalling excesses of savagery. Individual observers, however, who from the vantage ground of safety were able to contemplate the novel and distressing phenomena of the peasants’ revolts, were able to investigate causes and to suggest remedies. They usually, at this date, preferred to put their inquiries and proposals before the world in the form of “utopias.” They did so partly because they were thus less liable to prosecution as revolutionaries at the hand of the sensitive secular authority, and partly because the vehicle of fiction enabled them to incorporate all those novelties of idea and institution which the discoveries of the islands and continents of the New World had revealed to the imagination of the Old.

Among the visions of ideal states framed during this period, five have significance for students of the development of the social sciences. Of these one, More’s *Utopia* (1576), belongs properly to the earlier or Renaissance portion of the period; the remaining four are

manifestations of the Reformation era, viz., Andreae's *Christianopolis* (1619), Bacon's *New Atlantis* (1627), Campanella's *City of the Sun* (1637) and Harrington's *Oceana* (1656). Sir Thomas More's great romance, which gave its name to the whole series of imaginary commonwealths, is by far the finest and most illuminating of all. It relates especially to early Tudor England, but it depicts conditions that were common throughout western Christendom. It delineates in vivid colors (as they would appear to a visitor from a distant and very different land) the evils of the age and locality. It examines their causes, and enumerates them under the main headings of bad government, dishonest business, unjust and unwise finance, enclosure, sheep farming and, above all, the institution of private property. It does not directly prescribe remedies but, instead of doing so, describes the constitution of the remote island of Utopia where a better order of things prevails. That blissful island, it appears, is happy in community of property, an autocratic administration, state controlled family life, rigidly regulated and enforced public education, and religious toleration. The eminently conservative and Catholic Sir Thomas More by means of his brilliant flight of imagination let a large number of revolutionary ideas loose upon the world. It should be noted, however, that More's *Utopia*, like Plato's *Republic*, assumes the institution of slavery as its basis.

Andreae's *Christianopolis* is merely a Lutheran version of More's *Utopia* without the slavery and without the religious toleration. It is strictly sectarian in its organization; regular attendance at church is its primary regulation. Next to religion education is prominent. The material goods of life, which are possessed in common, seem to be plentiful; but whence they come does not appear.

Education, secondary in Andreae's *Christian-*

opolis, is primary in Bacon's *New Atlantis*. The interest in this rather dull and pedantic work centers in the picture which it presents of "Salomon's House," a great civic college where all the arts and sciences are investigated. Campanella's *City of the Sun* displays the idea of the mediaeval monastic organization—celibacy excepted—applied to the constitution of a model city-state. It is rigorously governed, on principles of poverty and frugality, by autocratic religious rulers. Labor is compulsory; its products are pooled; both property and wives are held in common; population is regulated by the authorities on strictly eugenic lines.

Harrington's *Oceana*, a long and labored fantasy, is important in the history of the social sciences as foreshadowing the economic interpretation of history. Harrington was a keen advocate of the doctrines of the sovereignty of the people and the natural equality of men. He perceived—and he was one of the first of moderns to do so—that true democratic equality is unattainable, or at any rate unmaintainable, in the presence of great inequalities of wealth. Hence in his *Oceana* the prevalence of equality is secured by periodical redistributions of land, coupled with an administrative system according to which (as in Periclean Athens) all citizens hold office in turn.

Harrington wrote during the period of the Protectorate of Oliver Cromwell in England. It was a period of tremendous vitality, full of conflict and controversy, amazingly rich in seminal ideas in all departments of social and political science. Even a cursory study of the pamphlet literature of the time makes it abundantly clear that there is scarcely any important conception which has molded the thought of the subsequent three centuries that is not in some shape or form anticipated by some speculator of this robust age.

F. J. C. HEARNshaw

VII

The Rise of Liberalism

I. If liberalism be defined as the attitude which tests the validity of behavior and of institutions in terms of the rational consent of men, it is permissible to regard it as the younger and unwanted child of the Reformation. Social philosophy is, indeed, always the offspring of history; and the stages of its development are unintelligible save in terms of the events out of which it took its rise. Every thinker who essays the task of interpreting the needs of men is, at bottom, writing his own autobiography. For what he recounts is an analysis of his own experience, his effort to make systematic the lessons he has learned from the facts about him. Of no period is this generalization more obviously true than of the seventeenth century. If the Reformation gave birth to the absolute state, the poison of its autocracy provided its successor with an effective antidote. For the absolute state was born of war and persecution; and meditation upon the price to be paid for its establishment drove men to the consideration of alternative philosophies.

The seventeenth century is, in an emphatic sense, an age of critical transition; and it was therefore natural that its manifold uncertainties should make it the birthplace of the liberal temper. If older dogmas still lingered on, they were examined anew and challenged. If older philosophies still asserted their prestige, their rivals displayed a new and ultimately victorious certitude. It is the age in which scientific method and experiment first secured their dominating hold over the minds of men. It is the age, also, in which men began slowly, doubtless, and with pain to test religious claims in terms of social cost; and therefrom to replace the theological foundations of political authority by principles more capable of a rationalist interpretation. It is, not least, the age in which the edifice of feudalism is recognizably in profound decay, and economic organization becomes the effective expression of a national policy conceived in the terms of what state power is held to demand.

These changes are evident in the seventeenth century; but it is important to remember the prelude to their emergence. The overthrow of

the mediaeval papacy provoked everywhere a widespread spirit of challenge and inquiry. New dogmas no sooner arose than the demand was made for their justification; new authority was no sooner proclaimed than its pretensions were ruthlessly examined. Novelty in the sixteenth century was so widespread and so various that the rational temper which is the root of liberalism was its logical and necessary outcome. Lutheranism had hardly created conditions for the rediscovery of the divine right of kings when the emergence of Calvinist sects, especially in France, Scotland and Holland, made necessary the doctrine of a social contract. Huguenot writers had hardly insisted upon the right of revolt in the nobility before the Catholic opponents of Henry IV had transferred that right to the people at large. The ink was scarcely dry upon the claims of Spain and Portugal to empire when England and France entered into the competition for the spoils of geographical discovery. The revival of classical learning had poured a new content into philosophic and religious speculation. The rise of mathematics in its modern form pushed supernatural hypothesis from the center to the circumference of thought. The birth of Biblical criticism combined with economic need to make the cost of persecution—the advantage, therefore, of a rational tolerance—seem increasingly obvious over a widespread area. And if the absolute prince was prepared to play the despot in the name of his private creed, men were forthwith prepared to inquire whether political power was not a trust, to be forfeited where it was betrayed. Without the passionate intellectual ferment of the sixteenth century, the liberalism of the seventeenth would hardly have been possible; certainly it would have been neither so widespread nor so creative. As it was, it developed naturally in a soil well prepared for its reception.

With the seventeenth century we emerge into a Europe which had replaced the mediaeval ideal of a single and unified Christian commonwealth by a system of independent and sovereign states, no one of which conceived itself as

owing duties to its neighbor. The consequences of this change can easily be underestimated. It meant not only the rejection of the temporal supremacy of Rome and with it the rejection of the moral outlook in politics of which Rome was the appointed guardian. It involved also a growth in the secular temper, a replacement of values conceived in terms of eternal spirit by values conceived in terms of earthly power. This made possible the development of an idea of progress, the rejection of the social consequences involved in the doctrine of original sin. For power was dependent upon the discovery of new truth; and new truth, in its turn, was the result of applying reason to the analysis of phenomena. Once that step had been taken, the evolution was natural, first, to the insistence that there are no limits to the empire of mind, and, second, to the inference that the growth of mind was also the growth of good. Once such an attitude was possible, it was clear that the claims of tradition and antiquity were assailable in their innermost citadel. We can, indeed, already see the beginnings of the challenge in the sixteenth century. The reputation of Galen was obviously undermined by the researches of Vesalius; Aristotle lost his mediaeval preeminence after the attacks of Cardan, Ramus and Bruno; Copernicus' attack on the cosmology of Ptolemy made necessary a new and unimagined theory of the universe. The epoch of the Reformation was well aware that it stood upon the threshold of gigantic discovery. Gargantua tells Pantagruel that the field of study is wider in his day than anything known to Plato or Cicero or Papignan; and Peter Ramus with his claim that "a single century has seen a greater advance than . . . in the whole course of fourteen previous centuries" bespeaks a temper in no sense mediaeval. Obviously enough the seventeenth century reaped the harvest its predecessor had sown.

What, in fact, was that sowing? There are three conditions of the inheritance upon which it is necessary briefly to dwell. Geographical discovery, continuous throughout the sixteenth century, gave a new spaciousness to the minds of men. It accustomed them to the ideas of novelty and diversity; it broke the cake of custom to which they had been used as nutriment. The social consequences of the discoveries were tremendous. They involved corporate enterprise instead of individual enterprise; and this, in its turn, made the machinery of the state a vital factor in the encouragement

and protection of trade. They meant, in the second place, a realization, infinitely more acute than in the past, that human habits were immeasurably more various than had been imagined; and this, in its turn, was not only a dissolvent of tradition, but also, as is evident from the utopias, a new basis for social idealism. From *Utopia* to *Télémaque* every romance bears witness to a new attitude to paganism; and the introduction of the noble savage into literature is nothing so much as a method of criticizing traditional social arrangements. It is not too much to say that no factor was more potent than geographical discovery in persuading men that institutions are by no means unchangeable and that the human will is itself a factor in the making of change. The discoveries, moreover, meant settlements and colonies, and in these it was rarely possible to maintain the more rigorous formalities of status habitual in the old world. As a consequence travelers' tales from the West are tales of men who rise above their station, and of religious differences that are forgotten or abolished in the union necessary for self-preservation. Nor must we omit the significance of the voyages as a factor in the triumph of rationalism. For their revelation of variety in social arrangements, economic not less than political, gave rise to the need for comparison between different principles; and here, once more, the power of tradition had slowly to give way before the need to convince the reason of men. The necessity of kingship, the power of a priesthood, the permanent division of society into rich and poor, appear less final than before to men who have been told that societies both exist and prosper in which no such principles are for a moment tolerated.

The new geographical world implies, then, at least slowly, a new social world. The same result follows from the impact of scientific discovery and philosophic system. The essential effect of the Copernican revolution was the withdrawal of cosmology from the field of revelation. It had become necessary to interpret the universe not in terms capable of being reconciled with traditional theology but in a manner consonant with observation and experiment. In the long run it is not improbable that the growth of science was more fatal to ecclesiastical pretensions than any other single influence. For it established an order of nature which not only contradicted received theological opinion but also demanded unlimited inquiry

as the condition of its own development. Once again, therefore, it made for the acceptance of novelty, and this, in its turn, meant the triumph of rationalism. Implied in that victory was the perception of the common sense of toleration; for heterodoxy in natural philosophy could only be penalized in terms of an arrest of knowledge. By displacing the earth as the center of the universe, the Copernicans, albeit only half consciously, displaced the theology which had sponsored the adequacy of the Ptolemaic system. In its place they put the principle of reason and thereby they dethroned the pretensions of the supernatural to be the residuary legatee of human ignorance. For when so much could be rationally explained in terms of the new scientific certitude; when so much newly explained meant the overthrow of what tradition had persuaded men to regard as ultimate; the acceptance of the supernatural as the source of hypotheses gave way in part to skepticism and in part also to a belief that the patient analysis of phenomena by the new methods would alone reveal to the mind secrets which had thus far defied its scrutiny.

This, at least, is the attitude which, in an incomplete and fragmentary way, the sixteenth century passed to its successor. It is worth while to emphasize in a little detail the use made of the inheritance. Broadly speaking, the canon of the new era was the necessity of a direct appeal to nature. Reason was to act upon the evidence of the senses, not as in the previous period after all authority had been exhausted, but as the only way in which an authoritative explanation is available. Laboring upon the foundations which Copernicus, Kepler and Tycho Brahe had laid, the seventeenth century may be said to have built, by the method of observation and experiment, a new material universe. With its details, of course, we are not concerned. But we must note that the new calculus of measurement permitted the formulation of laws which explained the action of every body in the universe. And what to the age seemed striking about those laws was their revelation of a universe capable of reduction to a strict mathematical interpretation. The natural thereby became identified with the rational; and the discoveries which culminated in Newton's laws seemed to set a model for every field of human inquiry. Guesswork, chance, tradition, were simply annihilated. A world came into view in which hypothesis became certitude by experimental verification.

And when to the triumphs of the method in the field of mechanics were added those of Torricelli and Pascal, of Boyle and Huyghens, it is not difficult to understand the intoxication of the century with its own achievement.

The philosophic significance of the new science, indeed, was perceived even before its experimental triumphs had been secured. With Giordano Bruno it had already led to a half-intuitive perception that in a universe so constituted Christian truth became an episode and a fragment, that a mystic pantheism free from historic dogma of every kind was the only religious consolation left to man. In Bacon it led to the sense that by the scrutiny of the secrets of nature man might obtain power over her for his own ends. Central to his thought are a complete contempt for what has gone before and a confidence that the method of experimental inquiry is the highroad to truth. Science for him has become definitely humanized. It is independent of all theological trappings and subservient to definitely practical ends. It is a secular instrument, asserting its own right to investigate because of the power it will attain through knowledge so revealed. That Bacon only imperfectly understood the significance of the new discoveries is doubtless true; but his sense of their bearing upon human destiny is, in its largest outline, both new and far-reaching. It will, he has no doubt, give man new dominion over nature; and in that authority, discoverable only by the careful scrutiny of natural processes, the source of his happiness will be found.

What Bacon clearly implied was the idea of progress; and with that implication there necessarily goes a tacit condemnation of the whole theologic structure. He did not, indeed, as his insistence that his epoch is the old age of humanity makes clear, fully understand the import of what he was struggling to say. He was in the new age, but not completely of it. The philosophy which first frees itself completely from the ancient moorings is Cartesianism; and without a grasp of the impact it made, the rise of a liberal doctrine is unintelligible. The significance of Descartes lies in the majesty of the claims he made for the new methodology even more than in the discoveries for which he was sponsor. By his insistence on the supremacy of reason he challenged the whole power of faith and tradition. By his affirmation that the laws of nature were unchanging he banished the idea of a presiding

Providence from the order they governed. Once the revolution these notions implied had come to maturity, the triumph of a secular world over a theological conception of the universe was inevitable. And maturity came as soon as the discoveries of the century seemed to affirm the truth of Cartesian hypotheses. There were then present all the solvents required for the final rejection of mediaevalism. To abolish Providence was to throw man back upon himself. To throw him back thus was to insist that reason must know no bounds to the empire it investigates. Once that is argued, the way lies open for the emergence of the liberal spirit; and with its emergence in the scientific field it was inevitable that it should make its way into matters of social constitution.

This does not, of course, mean that the new science triumphed quickly, or that the spirit it involved made its way easily into other realms. Puritanism in England was hardly conscious of its influence or, where it was conscious, was hostile; while the Jansenist movement in France, though its leaders avowed themselves Cartesians, was in effect inimical to the progress of the scientific attitude. The cause of its victory lies in a wide variety of fields. Partly the reason is to be found in the discredit religion brought upon itself. The excesses of Puritanism produced a reaction, and in that new atmosphere what triumphed was not the religious spirit, but deism, on the one hand, and toleration, on the other. In France the religious revival of the early seventeenth century did not endure; and the struggles between Jansenist and Jesuit, between Catholic and Huguenot, enormously increased the area of religious indifference. This, in its turn, opened the road to the confluence of certain critical tendencies of which the cumulative power was enormous. There was the inheritance from Rabelais and Montaigne of the belief that man finds himself in an obedience to his impulses which, by its genial epicureanism, is at once a protest against the ascetic discipline of the church, and a gospel of pleasure for pleasure's sake which makes reasonable choice, and not traditional pronouncement, the path to the good life. In the hands of men like Saint-Evremond the attractiveness of this doctrine became obvious; and it fitted in easily with the picture of the "honnête homme" so admirably incarnate in the aphorisms of La Rochefoucauld. There is the development, further, of religious rationalism. Deistic hypotheses made enormous

progress during the century. Lord Herbert of Cherbury, Hobbes and Selden in England, the *Libertins* in France, Spinoza in Holland are all of them evidence of how far the old orthodoxy had been undermined. John Spencer and Spinoza laid the foundations of the scientific treatment of Hebrew institutions. Richard Simon started the scientific study of the Old and New Testaments. When Bayle came to write his great dictionary he was attempting to build a structure of disbelief the foundations of which had already been planned.

In a sense nothing shows this more clearly than the change in the temper of religious defense. Apologetics in the hands of Chillingworth and Tillotson, even of Pascal and Bossuet, has an atmosphere of reasonableness about it far different from that of the previous century. The half-conscious influence of the Cartesian spirit is omnipresent; and the extent of its triumph is perhaps measurable by the rapid growth of deistic literature in England once the Licensing Act was repealed in 1694. It is to be seen, also, in the constant admission by the theologians of the time of the degree to which skepticism had penetrated among the multitude. The age, said Tillotson, is "miserably overrun with skepticism and infidelity"; and Bossuet's letter to Huet of 1678 is an avowal of an unbelief which he does not doubt is wider than at any previous time. Nor is it without significance that the most famous defense of the Christian faith in the seventeenth century—that of Pascal—should have been hardly less a grammar of skepticism than a justification of credence.

Science, philosophy and theology, therefore, all reveal in the seventeenth century the increasing permeation of the rationalist temper. They show a generation driven back to first principles, with the eternal result that the inheritance is transformed in the process of examination. What the seventeenth century commenced its successor completed. What had been moderate and half-hidden in the one became determined and decisive in the other. The eighteenth century in France and England is nothing so much as a determined onslaught upon revealed religion. The attack of Hume is its supreme intellectual expression; but Voltaire, Diderot, Holbach, to name only the outstanding critics, set the ecclesiastical phalanx permanently upon the defensive. The real achievement of the philosophic movement of the eighteenth century was to complete the case

for a purely secular conception of social life. Building upon the acceptance of the Newtonian universe, they made the literal interpretation of the Christian revelation impossible to intelligent men. And therefrom they drew the inference that if its theology was dubious its power was without justification. They denied altogether the sanctions it proposed to exercise in political and social life. They destroyed that alliance between church and state which had made the beliefs of men the test of their capacity for citizenship. By rendering at best dubious the adequacy of the beliefs themselves, they made of religion a private matter independent of the overt expression of conduct, and created a secular ethic with which alone, as it received outward form, it seemed legitimate for the state to concern itself. Naturally enough this victory of the utilitarian temper did not make its way with ease. The triumph of the Toleration Act must be set alongside the defeat implied in the revocation of the Edict of Nantes. But it is notable that the eighteenth century in England saw no effective revival of religious persecution; and if Calas and de la Barre were executed in France, the most striking element in their fate is the applause which greeted Voltaire's vindication of their names. By the time of the French Revolution men were able to think and to say things that before 1700 would undoubtedly have involved a ruthless persecution. They were able to do so because the ecclesiastical interpretation of life had ceased to occupy the center of the stage. Its view of the universe having been rejected, the principles of the new philosophy were applied to realms which had once been deemed its own empire. And until the revival of mediaevalism with the romantic movement, the claim of theology to a dominating place was not so much challenged as neglected by those who set the temper of men's thoughts.

II. Not, of course, that the scientific development and its consequences are independent of political and economic events. Anyone who seeks to explain the rise of liberalism must at least indicate its connection with new institutions in the world of practical life. In one sense, at least, the fundamental event of the seventeenth century is the emergence of the middle class into political significance. The Dutch Rebellion and the English Revolution are the two outstanding expressions of its power; but it is also important to remember that civil war

in France, in destroying the nobility as a political factor and making possible the centralized despotism of Louis XIV, left the monarch and the middle class face to face as soon as dissatisfaction should develop. The rise of the middle class is important because its economic needs required a type of liberty of which constitutionalism was by all odds the best expression. The middle class needed exactly the central principles of liberal doctrine if it was to prosper. It required religious toleration because the establishment of this principle was inextricably intertwined with the rights of property. It required limitation upon monarchical prerogative lest it be ruined by arbitrary taxation. It required a controlled aristocracy because the establishment of internal peace was the essential condition of commercial prosperity. It required the abrogation of the mediaeval theories of restrictive regulation in the interest of morality because in such terms individual enterprise could not reach its maximum fruition. The new economic order, in a word, required a secular state; and a secular state, in its turn, required a liberalizing doctrine if politics was to be more than a branch of theology. What the scientific revolution had begun the utilitarian revolution completed. Right gave way before the claims of expediency. A state was built which corresponded to the wants of the new men to whom power had flowed.

It is worth while to dwell for a moment upon the ideological significance of the three great political events of the seventeenth century. The successful establishment of the Dutch Republic was the first organized invasion of the monarchical principle in the modern world. It was a success which came in the name of religious toleration and the right of a nation to determine its own destiny. It offered immediate proof that its basic principle was the parent of religious toleration; and its permanence was a victory not only for constitutionalism against autocratic government but also for the independent and sovereign state as the form in which the exclusiveness of nationalism seeks naturally to clothe itself. The English Revolution, in which the final synthesis of 1689 is only the culmination of a movement lasting some fifty years, brings with it not only religious toleration and constitutional government (both of them, as in Holland, the parent of commercial prosperity), but also the creation of a parliamentary system the implications of which

change the whole substance of political philosophy. There is even a sense in which the despotism of Louis XIV may be said to have enforced upon men's minds the belief that the constitutionalism of England and Holland was of superior validity as a governmental system. For after 1685 it was no longer accepted as other than a system in decay. The ruin it had produced was not only obvious, but in striking contrast to the prosperity of its rivals. Saint-Simon, Fénelon, Vauban, Boisguillebert, all point the lesson that in some fashion the arbitrary exercise of power is incompatible with the attainment of social good. Their successors among the *encyclopédistes* of the eighteenth century are occupied in nothing so much as the conversion of public opinion to that view. They were successful in their effort; but the *malaise* of the monarchy was too deep to make peaceful reformation possible. The failure of French liberalism in the seventeenth century to secure institutional expression is the essential cause of the breakdown in 1789.

Nor must we forget the influence upon social institutions of the breakdown of the mediaeval economic organization. A new economic imperialism destroyed the old supremacy of the eastern market; and with its coming the scepter of trade passed from Venice and the south German cities to the states of the Atlantic seaboard. Capitalist enterprise, especially in textiles and in mining, made impossible both by its extent and power the retention of ancient regulation. Commercial companies discovered in the use of the state prerogative methods of legal organization which were revolutionary in their significance. A financial technique was evolved which synchronized with both the collapse of rural social categories and a catastrophic change in the price system. By the middle of the seventeenth century the economic world was characterized by all the main features which distinguished it until the application of steam power to industry. The wants of the new economic order were incompatible with the mediaeval notions of fixity and status. The new markets demanded enterprise; the new factories demanded free labor. Religious opinion, not less than political philosophy, adapted itself with remarkable swiftness to the wants of a new world. They accommodated themselves to a conception of life in which the possession of property was the mark of virtue. They preached a gospel of work in which poverty became the expression of nothing so much as the disfavor

of God. That nature which, in the Middle Ages, had been the reflection of the Divine Will, became in the seventeenth century the response to human appetite—an appetite, moreover, freed by the new individualism from the restrictions of the earlier time. The development was rendered easy by the compromise effected by Calvin in his discussion of the problem of interest. Once the mediaeval ban on usury was lifted, religious precept was necessarily harnessed to the new institutions. The churches practically abandoned their obligation to formulate a social doctrine which should insist upon man's duty to his neighbor. When it could be plainly said that "it was not in simple divines to show what contract is lawful and what is not," it is obvious that the basis of economic arrangements had ceased to be theological and had become utilitarian. The Reformation and its aftermath had already shown how profound was the resentment of ecclesiastical discipline in the field of social policy; and whatever lip service was paid in the seventeenth century disappeared after the Puritan rebellion in England, and the reduction of the church in France to a pliant instrument of administrative purpose. Thenceforward the way was directly open to the idea of free contract as the basis of society; and with its emergence a purely secular standard of social values could prevail. Economic liberalism was the heir of the church's failure to understand the part it might play in the new world. An acquisitive society won the opportunity for unfettered development as soon as the church ceased to play the part of the critic entitled to test the moral adequacy of human effort and human institutions.

III. Political philosophy in the seventeenth century is, for the most part, English where it is important; the continent had no names to set alongside those of Hobbes and Locke. In Althusius, indeed, the impact of Dutch achievement and experience gave birth to theories of ample profundity; but there is little evidence to show that he deeply or widely affected the minds of men. The seventeenth century was mainly English because the prevalence of ruinous civil war upon the continent hardly left men space to do more than sigh for peace; and the relief at its coming was everywhere so great that, with rare exceptions, even an autocracy like that of Louis XIV was acceptable because it brought with it the cessation of conflict. But in England, until the last ten years of the century,

foreign war was an incident which hardly affected the substance of the national life; and the matter of internal conflict was such that the debate was bound to center about the fundamental problems of politics.

That is, indeed, obvious from the outset of the century. Already in Bacon, if we have a theory that is ultimately absolutist in temper, its whole basis is essentially utilitarian; and if he finds therein a place for the church, it is as no more than an effective instrument for the development of a state power conceived in purely secular terms. Even religious speculation may be said to have advanced the power of the secular state. For when the Church of England allied itself with the monarchy in the hope of destroying Puritanism it virtually abolished itself as an independent political authority; and the partnership of the Puritans with constitutional and radical theories hastened both the victory of Parliament and the advent of toleration. The lawyers, also, were a force in promoting the decline of ecclesiastical authority. For they not only attacked the desire of the church to be the inheritor of the religious courts, but they also provided the legal theories out of which the structure of the new state could be determined. Puritanism, also, acted necessarily as a dissolvent of mediaeval tradition. Since most of its devotees were to be found in the middle classes, it was inevitable that they should resent a state which, by persecution, interfered with their commercial effort and the prosperity of the country. They drew from their experience of its activities a bias against state action; and the liberal faith in a state whose interference is at a minimum is deeply rooted in nonconformist traditions. Puritan, also, may be said to be the dogma of equality in English political philosophy. Men like Lilburne and Rainsborough and Winstanley are the expression of the victorious spirit of a class which sees in the abrogation of special privilege the guarantees of its own well-being. The doctrine was premature as a philosophy because it failed to correspond to the distribution of economic power. The revolution that actually came was, as Harrington so magisterially perceived, essentially, in its final form, the constitutional expression of the new economic order which the previous hundred years had brought into being. A negative state, parliamentary government and toleration were all that the new class desired; and more radical theories, to which the disillusiones of a revolutionary period natur-

ally gave birth, had to wait for a more ample realization.

The most significant figure in the first part of the seventeenth century is Thomas Hobbes (1588-1679), in sheer intellectual power the most eminent name in English political philosophy. To understand at once his place in the mind of the century, and the import of his doctrine, we must realize, first of all, the significance of his intellectual contacts. He represents, with all his errors and inadequacies, the "natural philosophy" of the seventeenth century in the fullest sense of that term. Few men have specialized so profoundly in omniscience. Physicist, geometer, psychologist, metaphysician, Biblical critic, social theorist, there is hardly any department of human knowledge which was not swept into the generous ambit of his system. The friend of Galileo, the secretary of Bacon, the intimate of Mersenne and the Cartesian society of Paris, he was in close communion with the advanced scientific outlook of his time. He represents the first systematic attempt in English philosophy to erect a theory of the state upon foundations altogether independent of theological principle. Whatever the burden of his conclusions, the temper in which he worked was essentially what the new liberal outlook required. He is consistently rationalist, consistently utilitarian, consistently Erastian. He was fundamentally materialist and, in essence, utterly hostile to supernatural hypotheses in the realm of social thought. Both his ethic and his psychology show how completely possible it had already become for their principles to be worked out upon a basis entirely secular in character. If Hobbes' political philosophy is, *de Maistre* apart, the most powerful plea for autocracy that has ever been made, it is a plea built upon the assumption that every state is a completely self-sufficient organism which does not need to look outside itself for the sanctions of its conduct. That, perhaps above all, was the thesis of which the new order stood most in need.

Though Hobbes himself always insisted that his social philosophy was an integral part of his general metaphysic, it is no injustice to him to relate its emphasis directly to the events amid which he moved. He had seen the failure of the gunpowder plot; he was in Paris when Henry IV fell a victim to the dagger of Ravallac; he witnessed the "hot gospelling" which accompanied the beginning and the end of the civil wars. The fact that his work was the product of

a timid temperament, writing when a strong and stable government was sought above all things, justifies our seeing in it the fruit of personal experience rather than literary influence. Machiavelli and Bodin, Barclay and Bacon, he doubtless knew and profited by; but the reader of his political writings will hardly fail to realize that, even more, he was the shrewd observer of Pym and Richelieu, of Strafford and of Cromwell. In no writer of the period, indeed, is the lesson rough hewn from vivid contact with men more obviously set down. The problem he set himself is how to make a common life for men whose actions are always born of fear and self-interest. He posits a state of nature, after the fashion of his age, but it is a grim enough condition, a state of anarchy in which every man's hand is against his neighbor, and in which the lust for power destroys all security. He does not spare the details of his picture. "Continual fear and danger of violent death . . . no propriety, no dominion . . . but only that to be every man's that he can get and for so long as he can keep it." In such a condition men may be taken as broadly equal in their faculties since, in the absence of a recognized power of control, no man has mind or bodily strength enough to be free from the art or sudden violence of his fellows. From so dismal a world the one object of life must be the organization of release.

And the means of release are to be had. For if man is avid of power he also fears death; he desires comfort, he searches for security. Reason therefore suggests to him some form of agreement whereby peace may be attained. Reason urges him to leave the state of nature and thus gives him a law which we may term a law of nature in the sense that it is a precept of reason; but it is not a law of nature in the accepted sense. The law of nature is the power of man to do in the state of nature whatever he thinks fit. Included in it, indeed, are precepts which reason commands for the sake of self-preservation; and these, in their totality, are something akin to the moral law. But they are pointless enough in the state of nature, since there is no common authority to enforce them. This law of nature may bind us in reason, even in the pre-social state, since the rule not to do to another what you would not have done to you is the clear road to self-preservation. But it is, there at least, a rule without a sanction. It gains authority only by being applied; and a civil state is needed for its application.

Hobbes therefore assumes the making of a

covenant between men such that all surrender their natural rights to a sovereign, either by institution or by force. They then owe to this sovereign—be he a one or a many—an allegiance that is absolute and entire. This sovereign owes no duties to his subjects, while they are bound to one another to obey his commands. If, indeed, protection from insecurity does not result from the relationship, the subject is entitled to the resumption of his natural rights. But even then he has no remedy against the sovereign (since the latter owes no duty to him) and he resumes them at his own risk (since he has broken the contract with his fellows). He assumes, then, a sovereign power which, once established, is unlimited in extent; and the form of government can make no difference to its absolutism. Law is then simply a command of the sovereign, enforced by the sanction he institutes; and since there is no limit to the sovereign's power there is no such thing as an unjust command and, by inference, as an unjust law. As between different states Hobbes insists that there can be no condition save one of mutual distrust; "the law of nations," he writes, "and the law of nature is the same thing." But the weakness of the law of nature has been the absence of a common superior to enforce it; and the law of nations must, similarly, mean no more than the right of each state to do the best for itself that it can. A vital future lay before this rigorous positivism.

We have thus a state in which, for the preservation of peace, a sovereign has been instituted with unlimited authority to impose his commands. Hobbes is insistent not only that a monarchical system is the best form of state but also that all others are in truth a mere perversion of it; "other governments," he writes, "were compacted by the artifice of men out of the ashes of monarchy after it had been ruined by seditions." His case for monarchy is urged with singular vehemence; it may be that the fate of Charles I and the position of Cromwell made his sentences even more biting than was customary with him. A monarch's interest, he says, is necessarily one with the public interest. He can get all necessary counsel, and that in secrecy; he is less liable to the inconstancy and faction which attend the sovereignty of an assembly of men. The evils to be expected from favoritism seem to him less than in the case of an assembly "where all will play this game on the principle of *hodie mihi, cras tibi*." Nor does he see more than temporary

inconvenience in the problem of the succession. He preaches the necessity for the strict control of churches by the state in passages of extraordinary power; and the need for the destruction of voluntary bodies is asserted by likening them to "worms within the entrails of a natural man."

Hobbes' thesis is, then, clear enough. The evil nature of man makes peace impossible without restraint, and the more concentrated the power exerted over him, the more successful that restraint is likely to be. The liberty left to the individual is twofold. He may do whatever the law does not prohibit; and he may even break the law since what binds him to obedience is simply the fear of punishment. But because the object of the state is security, Hobbes admits what for him is almost a legal right of disobedience in certain cases. Reason, he says, does not permit us to suppose that a man can be bound to kill or maim himself, or to be compelled to self-incrimination; nor is he bound to kill others or perform work of a dangerous kind; and whenever—a notable concession born, obviously, of the times—the sovereign is unable to give the protection for which the state is made, man resumes his natural rights. What, broadly, he has set out to do is construct a theory of social organization in which the radical doctrine of a contract is turned to the service of despotism. He has been so impressed by the conflicts of the previous century that he searches for a technique of order, whatever cost to individual freedom its institution may cause. So overwhelmed is he by the price of anarchy that he is not even prepared to pay tribute—as Filmer indignantly noted—to the fashionable doctrine of legitimacy. There is nothing about divine right in Hobbes, whether in the secular or ecclesiastical realm, except by way of contempt; there is nothing, either, about the rights of conscience except their danger. He had clearly no patience with Grotius' effort to regulate by accepted moral precept the practises of states; "covenants of government," he said, "without power of coercion are no security." He had no confidence in any power but the sword, no belief in any motives save the meanest in human nature. All that he asked for was a sovereign—whether Charles I or Cromwell was immaterial—who could force men to keep the peace. The state was thus, for him, concerned not with social good but with the condition upon which all human welfare depends; it was a restraint, evil, it might be,

but necessary upon men's appetites. The form he gave to his argument cut away the ground from under the feet of his opponents. Granted his premise—and it is difficult to see how a Calvinist, for instance, could deny his premise—and his conclusion followed with irresistible logic. He represents at its maximum that intense desire for a strong authority, impregnable both within and without, which was natural in his time. And his sense of the state as the sovereign legislator which could brook no rival, whose will was law because no will was superior to itself, was destined to play a fundamental part in future political philosophy. From Hobbes to Rousseau and therefrom to Hegel, on the one hand, and, on the other, to Bentham and thence to Austin, was but a step; and when that step was taken the theory of the state was finally redeemed from all possible contact with alien principles.

IV. In a sense, however, Hobbes had come too late; a theory of autocracy did not suit a generation which wanted, indeed, order, but an order compatible with individual freedom. How profound was that want is evident from the rapidity with which England recovered from the sense of shock administered by the Cromwellian regime. The legitimate king was restored, but he, not less than his people, recognized that he had been restored upon terms. The debate between 1660 and 1689 is about nothing so much as the terms of the constitution; both parties had to recognize that a constitution was inevitable. When the brief reign of James II seemed to imply a monarchical experiment outside the limits for which men were prepared, the invitation to William of Orange followed at once. Its consequence was a king who reigned by parliamentary title upon conditions set out in the clauses of statute. The Revolution of 1688 led straight to the Bill of Rights and the Act of Settlement. The dependence of the crown upon Parliament was established; the Nonconformists were rewarded with a partial measure of toleration; the development of the Bank of England and the party system set the seal of finality upon the new system. In all this was implied dogma incompatible with the rigorous theorizing of Hobbes. It needed a more mediating philosophy if innovations so striking were to be put in the framework of doctrine.

The theorist of the revolution was Locke; and he did not conceal either from himself or

from his readers the purpose of his effort. It was the intent of the *Two Treatises on Government*, as he said, "to establish the throne of our great Restorer, our present King William, and make good his title in the consent of the people." What he sought was a theory of the state which would justify exactly the principles of the revolution settlement. He had to show that there were limits beyond which the sovereign power could not be permitted to go. He had to explain how a state might be built in which the share of the people in power, the maintenance, therefore, of their rights in form of law, was definitely established. He had to justify a solution of the religious problem which maintained such variety of outlook as was compatible with necessary political unity. He had to build a polity which left unfettered the individualism of the new economic order. He had, in a word, to build an alternative to the Hobbesian philosophy; and to do that, as he saw, it was necessary to go back to the foundations of the state. Locke, it may be, lacked altogether the clarity and the relentless logic of his great predecessor; and he had little of that genius for compressing into a phrase the experience of a lifetime which makes Burke the one classic in English politics who can still be read with delight. But he saw with unsurpassed common sense that the main problem of his time was such a theory of the state as would justify the maintenance of freedom in terms of individual good. What he had to do he accomplished with such mastery that for seventy years he remained the outstanding expression of political liberalism; and not until the advent of Rousseau did the philosophy of the state take a new direction.

Why, asks Locke, does political power, "a right of making laws and penalties of death, and consequently all lesser penalties," exist? It can only be for the public benefit, and his inquiry is thus a study of the grounds of political obedience. Locke thus traverses the territory Hobbes had covered in the *Leviathan*, though he rejects every premise of the earlier thinker. The state of nature is, for him, governed by the law of nature. The law of nature is not, as Hobbes had made it, the antithesis of real law, but rather its condition precedent. It is a body of rules which governs, at all times and at all places, the conduct of men. Its arbiter is reason and in the natural state reason shows us that all men are equal. From this equality are born men's natural rights which Locke, like the independents in the Puritan revolution,

identifies with life, liberty and property. Clearly, as Hobbes had also granted, the instinct to self-preservation is the deepest of human instincts. By liberty Locke means the right of the individual to follow his own bent, granted only his observance of the law of nature. Property Locke derives from a primitive communism which becomes transmuted into individual ownership whenever man has "mixed" his labor with some object. This labor theory of value, it may be remarked, lived to become, in the hands of Hodgskin and Thompson, the parent of modern socialism.

The state of nature is thus, in contrast to the view of Hobbes, preeminently social. There may be violence or war, but this is only when men abandon that rule of reason inherent in their character. But the state of nature is not a civil state. There is no common superior to enforce the law of nature; each man, as best he may, works out his own interpretation of it. But because the intelligences of men are different, the law of nature is differently interpreted. Uncertainty and chaos result, and means of escape become necessary from a condition which human weakness would make intolerable. It is here that the social contract emerges; and just as Locke's natural state implies a natural man utterly antithetic to Hobbes' gloomy picture, so does his social contract represent the triumph of reason rather than of hard necessity. It is a contract of each with all, a surrender by the individual of his personal right to fulfil the commands of the law of nature in return for the guarantee that his rights as nature ordains them—life and liberty and property—will be preserved. The contract is thus not general, as with Hobbes, but limited and specific in character. It is not, as Hobbes made it, the resignation of absolute power to the hands of an irresponsible sovereign. It is simply a contract of the members of the community with themselves to form a whole which thus becomes that common political superior—the state—which is to enforce the law of nature and punish infractions of it. Nor is Locke's state a sovereign state: the word "sovereignty," significantly enough, does not occur throughout the treatises. It is a state in which the minority agrees to be bound by the will of the majority for certain defined ends; but its province ends when its action passes beyond those boundaries.

Locke will have no truck with absolute power; and he has no patience with the divine right of kings. He dislikes oligarchy, because it

inevitably emphasizes the interest of a group against the superior interest of the community as a whole. Democracy alone offers adequate safeguards of an enduring good rule; a democracy, that is, which is in the hands of delegates controlled by popular election. He did not like republicanism; experience, doubtless, of the Puritan epoch had taught him that its disadvantages were serious. He was content to have a kingship divested of legislative power so long as hereditary succession and the making of laws were deemed to be dependent upon popular consent. The making of law, the formulation, that is, of the rules by which life, liberty and property are to be secured, is legislation and this, from the terms of the original contract, was the supreme function of the state. The legislature was to be bound by its own prescriptions; and the executive—in his view, a body of minor importance—was simply there to carry out its will. For him, at the back of each governmental act there is an active citizen body occupied in judging it with single-minded reference to the law of nature and their own natural rights.

There is thus a standard of right and wrong superior to all powers within the state. "A government," he wrote, "is not free to do as it please . . . the law of nature stands as an eternal rule to all men, legislators as well as others." The social contract is thus secreted in the interstices of statutes, and its corollary is the right of revolution. For to deny that right was to justify the worst demands of James II. "The true remedy," he said, "of force without authority is to oppose force to it! Let authority but step outside the powers derived from the social contract and resistance becomes a natural right; the state of nature supervenes, and a new contract may be made for which there is more hope of observance." Here, also, Locke takes occasion to deny the central thesis of Hobbes that since power must be absolute, there can be no such thing as usurpation by the sovereign. But Locke retorts that absolute government is no government at all, since it proceeds by caprice instead of reason; and he argues that it is comparable only to a state of war since it implies the absence of judgment on the use of power. It is wanting in the essential and continuing element of consent, without which no law imposes obligation. All government, for him, is a moral trust, and the idea of limitation is implied therein. But an unenforceable limitation would be worthless, and revolution remains

as the reserve power in society. The only hindrance Locke suggests is that of number; revolution should not, he urges, be the act of a minority. For the contract is the action of the major portion of the people, and its consent should likewise obtain to the dissolution of the covenant.

The problem of church and state demanded a separate discussion; and it is difficult not to feel that the great *Letter on Toleration* is the noblest of all his utterances. Not, indeed, that it stands alone; for it came as the climax to a long evolution of opinion and experiment in which the moral rightness and political adequacy of intolerance had been attacked on every hand. But Locke covered the whole ground, and it is notable that his outlook is built upon a denial that any element of theocratic government can claim political validity. The magistrate is concerned only with the preservation of social peace and does not deal with the problem of men's souls. He is entitled to suppress where opinions are entertained either subversive of the state or destructive of peace; though even here Locke thought that force was the worst of remedies. In England he was prepared, on these grounds, to deny toleration to Catholics, atheists and Mohammedans. The first, he thought, deny to others the rights they seek themselves, and they owe their essential allegiance to a foreign power. Mohammedan morals are incompatible with the civil systems of Europe; and there is absent from atheism—Bayle had just shown the contrary—the only satisfactory criterion of good conduct.

Though church and state are thus distinct they act for a reciprocal benefit; and it is thus important to see why Locke insists on the invalidity of persecution. For the cure of souls, he argues, the magistrate has no divine legation. He cannot, on other grounds, use force since it does not produce internal conviction. But even if it did, force would still be mistaken. The majority of the world is not Christian, yet it would, if force were legitimate, have the right to persecute in the belief that it was possessed of truth. Nor can he accept the implication that the magistrate has the keys of heaven. "No religion," he says finely, "which I believe not to be true can be either true or profitable for me." He thus makes of a church merely a voluntary society with no power save over its members. It may use its own ceremonies, but it cannot impose them on the unwilling;

and since persecution is alien to the spirit of Christ, exclusion from membership must be the limit of ecclesiastical power. Nor must we forget the advantages of toleration. It leaves the mind and actions of men unfettered; its eldest child is charity; without it there is no honesty of opinion. Later controversy did not make him modify these principles; and in the hands of his successors in England and France they became a vital argument for the completion of the secular state.

If there is little in the different elements of Locke's doctrine for which originality can be claimed, the synthesis itself was new, and the rapidity of its acceptance shows how welcome was its liberal temper to its generation. What opposition there was, was but the eddies of a stream fast burying itself in the sands. As early as 1693 Bayle could write that Locke has become the "Gospel of the Protestants." French Huguenots and the Dutch drew naturally upon so happy a defender; and Barbeyrac, in the translation of Pufendorf which he published in 1706, cites no writer as frequently as Locke. Addison, on six separate occasions, speaks of him in the *Spectator* as one whose possession is a national glory; and Swift softened his hatred of the malignant Whigs to find the epithet "judicious" for the man who was their master. He was, said Warburton, "the honor of his age and the instructor of the future." The eulogy is not too strong; for English political theory until the time of Hume is little other than a variation upon his central theme. Montesquieu paid him tribute when he made the separation of powers the keystone of his own more splendid arch. The teaching of Rousseau is only a broadening of the channel dug by Locke; no element integral to the *Second Treatise* is absent from the *Social Contract*. Rousseau, indeed, in many aspects saw deeper than his predecessor. He understood the organic element in the state, where Locke was still trammled by the bonds of his narrow individualism. Yet it would not be difficult to argue that Rousseau's theory is at no other point a real advance. The general will, in practical instead of semi-mystic terms, really means the welfare of the community as a whole; and for both the active consent of the individual citizen remains the central problem. Most of the difference between them, perhaps, lies in their historic position: Locke was justifying a revolution that had happened, Rousseau was to justify a revolution that had still to come.

It is this revolutionary element in Locke that gave him his significance in both the American and the French Revolutions. He laid down the essential thesis of liberalism that no government can ever be justified unless it draws its strength from the free consent of the governed. He argued that an invasion of reasonable claims makes legitimate a resort to force for the overthrow of the invading authority. That also is the essential claim of the Declaration of Independence; and the verbal resemblances between that document and the *Second Treatise* show how deeply Jefferson had drunk from the Lockian fountain. There was, indeed, reason and to spare for the irritable insistence of Dean Tucker that "the Americans have made the maxims of Locke the ground of the present war," and his jibe that Locke was "the idol of the Levellers of England," Price and Priestley, is true both of America and of France. For Locke is written large in the American bills of rights; and these, in their turn, were to be the principles of 1789. What Locke had sought to do was the effort also of liberals in America and France. He tried to construct a system of government which made it lie at the service of individual citizens. He, like them, was jealous lest it invade territory for the control of which he deemed it unsuited. He, like them, made individual consent, a vigilant citizen body, a limited executive, a separation of powers, the true bases of the state. It is not too much to claim that their triumph was his also.

V. It was not to be expected that the success of Locke in England would be paralleled upon the continent in his own lifetime, for the necessary institutions were wanting there. After 1614 the Estates-General did not meet again until 1789; and the *parlement* of Paris was a purely selfish legal corporation without real vision of a communal purpose. In both France and Germany, moreover, the combination of defective popular institutions and war was sufficient to make the need of a strong and centralized power more effective than the need for liberalism. What men ask for is a monarch who can rule, the cessation of civil strife, freedom from the heavy burden of taxation, relief from administrative oppression. In the vast pamphlet literature of the Fronde there are not half a dozen writers who seek any radical remedy; and even of these Claude Joly is the only one who has a system of any kind to recommend. The same conclusion is broadly true of Ger-

many. With the exception of Pufendorf, none of her political thinkers rises above a commonplace level. They are occupied either with merely legal technicalities or with the facile proof that monarchy is the best form of government. Even Leibnitz, for all his emancipation from authoritarian dogmatism, offers us little beyond a skilful defense, in the manner of Grotius and with no advance upon his matter, of the validity of natural law.

But the evolution of French political thought in the seventeenth century is significant. It has an official and a critical side. On the one hand are Richelieu and Bossuet, the one the outstanding architect, the other the supreme apologist, of the renovated monarchy; on the other are those—Jurieu and Bayle among the Protestants, Vauban among the officials, Fénelon among the clergy, Saint-Simon among the nobles—who ventured upon expression of their dissatisfaction with the regime. There is little in their argument that can be called at all justifiably a liberal doctrine. But the mood they represented, when linked with the inspiration that Voltaire and the *encyclopédistes* drew from Locke and England, and fanned by the new skepticism which grew from the union of naturalism, as in Saint-Evremond, and the claims of science, as in Fontenelle, became, with the decay of the monarchy in the eighteenth century, the distinctly French liberalism of which Voltaire and Montesquieu are the most important representatives.

Richelieu was a political philosopher indirectly only; the *Testament* and the *Maximes* are rather the acute reflections of a statesman upon his art than the expression of a coherent system. He represents, essentially, the supreme organizer who has come to restore order, whatever the cost of its imposition. Authority is to know no bounds, and disobedience is to be identified with sin. The prince, for him, is the state; to multiply the number of pilots is to ruin the possibility of a safe voyage. He insists upon the necessity of a rigorous but carefully masked control of the church; its doctrine may be left unfettered only so long as it does not impinge upon temporal power. Neither political assemblies nor corporations should be permitted in the state, for these represent a possible counterpoise to royal authority. Nor does Richelieu approve of municipal privilege; communities, he argues, never understand their own interests since “dans une communauté le nombre des folz est plus grand que celui des sages.” He does

not even hold with the supremacy of the courts in the purely judicial realm, but urges the need for extraordinary commissions to supplement, by royal prerogative, the inadequacies of judicial justice. The whole keynote of his theme is *raison d'état*; in matters so complex as those of politics, he argues in effect, attention to definite principles of action is impossible. He is not even deeply interested in the prosperity of the people; a little misery, he thinks, will keep their minds from wandering into the political realm. He has no use for the aristocracy, except as the basis of the armed forces of the state. The whole is a sinister picture of a man avid for power and careless of, even uninterested in, the methods by which it is maintained.

The explanation, of course, is a simple one. No powerful and ambitious man could have passed through the experience of religious and civil war without insisting that the only path to safety lay in the presence of a Machiavellian prince at the helm of state. He wrote of what he had himself achieved; and the years of Louis XIV's minority are an apt commentary on why his views shaped themselves as they did. The wars of the Fronde stand out in singular contrast to the contemporaneous civil wars in England. They were purely factional fights of selfish minorities seeking to profit themselves from the feebleness of an incompetent regency. They produced no great leader and no great thinker. In the several thousand *Mazarinades* there are not half a dozen which express more than the misery or the passion of the moment. Only Claude Joly, as the wars came to a close in 1652, showed some power of insight into the principles of government. He at least sees that all power must rest upon a popular origin and that there can be therefore neither a divine right of kings nor an unlimited royal authority. Kings exist for the good of their peoples, and tyranny implies a right of resistance. Joly sees, too, the importance of individual liberty; and his detailed condemnation of Richelieu's judicial methods shows that he holds firmly, as befits the grandson of Loisel, by the supremacy of fundamental law. He demands a meeting of the Estates-General, and refuses to admit a right of taxation without its consent. Nor, in his judgment, has the king the power to make law without the consent of the constituted magistracy of the realm; and this must be given without the exercise of undue pressure. He urges, finally, that no war should be made except as a last resort and then only after the

king has taken counsel with the Estates of the kingdom.

Here, at least in outline, is such a liberal program as neither Pym nor Hampden in England would have rejected. But it came too late. There were neither the leaders to advocate, nor the institutions through which to work, its possibilities. When Louis XIV began his personal rule in 1660, the stage was already set for centralized despotism. Louis himself was intent upon the fullest possible exercise of his prerogative; and the unintelligent memoirs that he composed for the instruction of his son reveal a mind in which the hypothesis of divine right had assumed axiomatic form. Contemporary theory in France, at least, had no creative alternative to propound. The textbook writers, Priézac, Scudéry and the rest, all repeat the ornate commonplaces which, as in the reflections made for Sir Thomas Elyot, did duty in sixteenth century England for political wisdom. It was not until the advent of Bossuet that an attempt was made to give the Augustan autocracy a theoretical foundation.

Few writers on politics have received panegyrics so splendid as Bossuet; few also have done so little to deserve them. At bottom his political philosophy is little more than the conclusions of Hobbes loosely set in a theological context which he did not realize to be already obsolete. The magnificent eloquence, indeed, serves often to conceal the poverty of the thought; and the reality of the learning in which the conclusions are clothed often gives them the air of being a system of rigorous inferences from the accumulated wisdom of the ages. But what, in sober fact, has Bossuet to say? Like Hobbes he draws a grim picture of an evil state of nature from the anarchy of which men are only too glad to escape. Like Hobbes, also, he insists that absolute power alone could end so terrible a condition. With his English predecessor he concludes that the rights of the subject are no more than a concession from the sovereign power, and that monarchy, which best assures peace and order, is by far the best form of government.

Here, at least, is nothing of novelty. It is true enough that Bossuet, unlike Hobbes, sets his conclusions in the background of a philosophy of history which, built upon the theses of St. Augustine, makes Providence the master of historic events. It is true also that the principles of his *Politique tirée de l'Ecriture Sainte* are made to depend upon the support

of Scriptural texts. But the foundations of his system are in fact mostly independent of all theological apparatus. The unity of a people is dependent on sovereignty being invested in an absolute prince whose power is of God: "the royal throne," he says, "is not the throne of a man but of God Himself." All government is entitled to respect, and revolt is the antithesis of the spirit of Christianity. No citizen has any right to attack the public power; and therefore even the prince who does evil must be obeyed. He denies altogether the contractual origin of political authority, and makes prescription the basis of a title however brutal its origin. Popular government, for him, is always the parent of tyranny; and the freedom of the individual means in the end popular government. Kings therefore are absolute, since without such power they cannot fulfil the purpose of authority. To be absolute, indeed, is not to be arbitrary; the king should obey those fundamental laws which are built on equity and right reason. Freedom of the person and property deserve respect; and the king must make the care of his people his first obligation. But he is himself the sole judge of how and when his obligation should be performed.

It is not difficult to see beneath the mask of Bossuet's seeming abstractions a system of generalizations from the events of his time. His state of nature is the wars of the Fronde; his people as the tyrant are the Puritans under Cromwell; his king who acts as father, under God, to his subjects is the professional eulogy of Louis XIV. As a philosophy it might well have succeeded had prosperity attended upon Louis' effort. But defeat abroad and misery and intolerance at home combined to evoke a protest against its assumptions which provided the foundation for the emergence of liberal ideas. The Huguenot pastor Jurieu proclaimed, if in exile, the right of the people to cashier an evil ruler, and insisted that its sovereignty is the only legitimate basis of political power. Bayle was only the most learned and able of a score of writers who made the case for religious toleration with a width and insight that not even Locke surpassed. Vauban and Boisguillebert exposed, in merciless detail, the ruin wrought by Louis' disastrous policy; and though the fiscal remedies they had to propose were timidly incomplete because they lacked a sound institutional scheme to give them effectiveness, at least they showed that men were prepared for innovation.

The diaries and projects of Saint-Simon reveal that even at the center of the aristocracy the grim despotism of Louis' later years was bitterly resented; and if his proposals are no more than reactionary traditionalism they are at least striking in the whole-hearted condemnation they imply. Boulainvilliers also, himself a lesser nobleman, reveals a mind utterly out of accord with the regime under which he lives. He attacks as vicious the administrative centralization which was the whole pivot of Louis' absolutism; and with a knowledge of past French history remarkable for its time, he condemns both divine right and *raison d'état* as incompatible with the well-being of the state. Like Saint-Simon he has no better remedy than the restoration of traditional institutions—a limited monarchy, a reformed administration, an active Estates-General. But Boulainvilliers had at least grasped the essential weakness of the regime he attacked; and his power of technical criticism is a new feature in the literature of his age.

Yet it is perhaps Fénelon who shows most fully how liberal was the new temper which had emerged. The tutor of the Duke of Burgundy and Archbishop of Cambrai, he had seen the working of the system from inside, and his rejection of its principles was built upon an intimate experience. He was in no sense of the word either an innovator in reform or an originator in ideas. The power he had and the influence he exerted came from the courageous clarity of the testimony he bore to the ruin worked by Louis XIV and from his determination to try all political conduct by the touchstone of ethical principle. He wrote not merely as a Frenchman but as a citizen of Christian Europe, concerned to insist upon its general interests even above the special rights of France, nor is it insignificant that his most earnest remarks should be set in the mouth of a pagan. If he had favored the revocation and applied its cruelties in his own diocese, he learned the error of persecution and insisted that France needed not merely the recall of the Huguenots but a system built upon toleration. Ultramontane though he was, he disliked the interference of the church in political affairs, since he saw that the alliance of church and state made inevitably for ecclesiastical slavery. He denied that love of one's country can absolve a patriot from duty to mankind; and he attacked aggressive war as in all cases indefensible. Not only did he urge the restoration of French

conquests, but he saw the wrong done to Europe by the French occupation of Spain, and he wrote of Protestant and tolerant Holland as the hope of mankind. To him all power was by its nature poison; and he wrote of kings that their badness is practically inevitable. They must accordingly be the mere ministers of the law; and a constitution is essential to a well ordered state. For him political authority was the rightful possession of the nation, and there was a health-giving energy in its exercise for which no despotism, however efficient, could compensate. Despotism, indeed, always saps the strength of a people, and he predicted revolution as its necessary consequence. His remedies are not, perhaps, original. A limited monarchy flanked by a system of local and central assemblies, in which the aristocracy played the predominant part, had been recommended by others. But Fénelon saw the importance of legislation as a weapon for molding character. He realized, too, that participation in government is itself an exercise in the creation of individual personality. He demanded freedom of trade, an administration whose methods are built on a careful statistical assessment of the national resources, an adequate civil service and a purified judiciary. In his emphasis on the danger of luxury, the evil of an idle class, and the necessity of education as the base of national well-being, there is, clearly enough, something of the Platonic revolutionary. And his conception of history as set out in the *Letter to the Academy*, his insistence that institutions are more important than persons, that the habits of the nation are the pith of the record, show him as a genuine precursor. Save Bayle, no thinker of the seventeenth century was more comprehensively the instructor of the eighteenth; Saint-Pierre, Montesquieu, Rousseau all went to school to his teaching.

The boldness of Fénelon's attack upon the system of Louis XIV goes far beyond that of his contemporaries. Bayle, indeed, laid down the ultimate methodology for a deeper and more destructive analysis; but his own political proposals are, toleration apart, merely the expression of the scholar's conservatism. The Huguenot exiles, most notably Jurieu in Holland and Abbadie in England, maintained with vigor the dogma of popular sovereignty; but their opposition to the regime was rather a *cri de coeur* than a soundly reasoned philosophy, and their position as exiles detracted from the

influence of what they had to say. The first ideas of French liberalism moved upon historic and conservative lines. What was proposed was to revive the power of the aristocracy, to restore the Estates-General and the provincial assemblies, to cultivate the mediaeval polity, rather than to bring the people into the structure of government. It was not until Voltaire had made England an example to French thinkers, and bankruptcy had become the eternal partner alike of success and failure in foreign policy, that revolution was accepted as the highroad to stability.

VI. France apart, European speculation in the seventeenth century is remarkable rather for its lack of distinction than for ideas by which the current thought was profoundly moved. Spinoza in Holland and Pufendorf in Germany almost exhaust the list of those who exerted anything more than a superficial influence. The reason for this barrenness is not far to seek. The devastating influence of the Thirty Years' War made men inclined to peace at any price; and epochs in which consolidation is the outcome of fatigue are rarely capable of speculation upon ultimate principle.

About Pufendorf there is no need to say much. He was in no sense of the word an original thinker, and his importance lies rather in the temper and amplitude of his mind than in any capacity for piercing to the root of political foundations. His *De jure naturae et gentium*, first published in 1672, represents an attempt to unite the irreconcilable systems of Grotius and Hobbes. Like the former he pleads for the supremacy of reason in affairs of state; and the law of nature is for him a rational rule, inherent in the character of man and enabling him to distinguish right from wrong. Like Grotius, also, he makes the state of nature sufficiently rational and peaceful to render it difficult to know exactly why civil society was ever deemed necessary. But with Hobbes he argues that most men are the creatures of impulse and that only in the civil state is respect for reason possible to the majority. This state he traced back to a twofold contract. Subjects contract with subjects to create a political community in a particular form, and subjects then contract with those designated to rule upon their respective rights and duties. He does not agree with Hobbes that the ruler is absolute. His power may be supreme, but it is restricted always by the terms of the contract. The way in which this restriction is to operate,

however, the sovereign is always to decide; and whatever validity the theories of Hobbes possess against the arguments of the great Dutch thinker must hold against Pufendorf also. He resembles Hobbes in his low view of men, his emphasis upon the worthlessness of the multitude, the emphatic repudiation of the Grotian hypothesis of a law of nations binding upon all men because it embodies the best experience of mankind. But the really outstanding feature of Pufendorf's work is its insistent secularity of temper. He will have nothing to do with explanations of political authority which find their source in theology; and he roundly denounces the defective obscurantism of contemporary ecclesiastics who seek political philosophy elsewhere than in the behavior of men. He is, in short, comprehensively rationalist in outlook; and the immense success which attended his book is evidence of the degree to which the rationalist principle accorded with the demands of the time.

Yet for all his success it is difficult to see in Pufendorf much more than a sublime mediocrity. Spinoza of course is one of the outstanding names in the whole history of political philosophy. But it is to be remembered that for almost a century after his death his influence on politics was small. Pufendorf and Bayle seem only to be outraged by his ideas. Locke does not mention him, while Vico dismisses him in one contemptuous sentence. It was not until the time of Lessing and Goethe that his supreme merits were understood in any effective degree.

The reason, indeed, is not far to seek. For him, as for his political master Hobbes, the whole basis of politics was rigorously utilitarian; but he differed, as he himself said, from his illustrious predecessor in that he applied his method with undeviating consistency. If there are present in him things like the state of nature and the idea of contract, none of them is essential to his method. His central thesis is the identity of right with power; and he uses the experience of history—his knowledge of events is remarkable for his age—to prove that the lesson of history is a justification of liberalism. For in the long run, Spinoza argues, the true and eternal sources of power are rational in character. The action of the state is always limited in fact by the knowledge that men are always measuring themselves against it; and it has power only as they fear it or love it. But, again in the long run, it cannot control those

things which men "cannot be induced by rewards or threats" to accept; therefore opinion and religion are outside its sphere. A state, he urges, cannot make men moral or religious, and its true strength is dependent upon their morals and religion. The true springs of action are in the internal nature of men, and the power of the state gives only outward conformity, which is never permanently decisive. Force, therefore, for Spinoza is powerless without reason. The ruler's right is thus limited by his wisdom and insight, by the measure of his justice and forbearance. For otherwise his subjects will depose him, or the civil state will be a condition of anarchy tempered by despotism. Wherever, he argues, there is sedition, there also is to be found governmental wrong. Nor does Spinoza think differently of international relations. Expediency suggests here, as in the internal economy of the state, the ultimate wisdom of the golden rule.

No more striking defense of liberal principle has ever been made in purely utilitarian terms; and it is upon the same terms, also, that Spinoza bases his defense of democratic systems. Here, indeed, the deep influence of Holland upon his theorems is obvious. The necessity of checks and balances, a wide diffusion of power to safeguard local liberties, the insistence that in a democracy alone is the government most representative of the community—this could hardly have been said in the seventeenth century save by an Englishman or a Dutchman. To Spinoza monarchy is clearly abhorrent; and though he analyzes the aristocratic principle with some sympathy, it is clear that the unfinished portion of the *Tractatus politicus* was to have been the culminating point of his speculation. Even as it is, the implications of the doctrine are unmistakable. The core of the argument is the insistence that the best government is that whose policy embodies the maximum self-interest. This is democracy because it allies with itself the will and the reason of the largest number of citizens. It makes their power its own; and it thus makes its right more permanent by the identification of their well-being with its own fortunes.

The eighteenth century, therefore, inherited from its predecessor a tradition of which the liberal principle was definitely a part. The idea of consent had been everywhere adopted as the obvious answer to the divine right of kings. The notion of utility had been everywhere put forward as the test to which the monarchical

system must conform. Consent meant the consent of men; utility meant the test of results. Each was in its essence an appeal to reason against an appeal to a principle of authority clothed in some mystic sanction which reason was unable to penetrate. This liberalism, indeed, was as yet a method of examination, a challenge to the existing order, rather than a philosophy which had become a part of the normal mental climate of the generation. It needed the moral bankruptcy of church and state before liberalism could move from a thesis of reform to a thesis of revolution. The work of the next generation was to apply it to existing institutions with an incisiveness and a determination which exhausted the moral credit of the new order. When that was done, liberals were in a position to prove that they had come not less to fulfil than to destroy.

VII. Until the seventeenth century was well advanced, historical studies had for the most part assumed three forms. Sometimes, as with de Thou, they recorded the passage of events as these impressed a single observer; they are the generalization of a diary rather than the philosophic examination of a record. Sometimes, as with Rymer, they are carefully compiled documents which are less history than the materials of history, even if, as with Tillemont, they reveal a learning and a documentary insight in advance of anything previously known. Or again, as with Bossuet, historical writing may be the anteroom of a particular theology, an exercise in the proof of a definite religious thesis, instead of a scientific effort to explain the evolution of civilized life.

It cannot be said that the seventeenth century saw any revolutionary change in the attitude to historiography. The necessity for care in controversy produced by the multiplicity of religious sects conduced to a greater precision in the handling of evidence; the great Anglican school of men like Usher and Bingham did notable work in the reconstruction of early religious history, and Tillemont, Baluze and Mabillon began forging the essential weapons of scientific scholarship. Yet even though such works as those of Bacon on Henry VII, of Selden and Conring on legal antiquities, of Gruter on classical inscriptions make it clear that a new and secular temper was emerging, the area of its activity was as yet by no means wide. Bossuet was able to suppress Père Simon's effort to handle the Old Testament in

a critical spirit. Lanoue's analysis of martyrology earned him abuse and not understanding. Pouilly's investigation, in 1722, of the legends of early Rome merely led to his denunciation as an atheist. Until the very end of the *ancien régime* it was both difficult to procure materials and dangerous to announce untoward results. Fréret went to the Bastille for denying that the Franks were Gauls. Giannone died in prison for his history of Neapolitan institutions. The Common Council of London withdrew its grant from Carte for maintaining that the Pretender had cured the "king's evil." Muratori could not gain access to many princely archives lest his researches should disturb some princely title.

Yet the progress of a rationalist temper is unmistakable. The skepticism of Bayle made possible the rationalism of Voltaire. Bentley in England, Reimarus in Germany, Vico in Italy made it evident that the critical attitude was European in its extent. When Hume in the mid-eighteenth century wrote his history of England he was attempting a broad narrative of the national life such as literature had not previously known. With many faults it added notable qualities to English historiography. If it was often prejudiced it was never enthusiastic; and the *odium theologicum* was entirely absent from its pages. Hume saw, too, the significance of social and economic history; and if he used his insight too casually, at least he used it. No British writer had previously seen the need to weave the threads of historic events into a single whole. What he began, Robertson continued. Nothing now remains of the histories of Scotland, Charles V and America with which he delighted his generation; although the man who gave to Keats his finest metaphor may perhaps rest content to have been supplanted by later research. Yet Robertson, like Hume, has great merits. He made history literature, and it did not leave his hands the servant of a particular party. He brought together a great mass of facts into an orderly and coherent whole. He was neither profound nor widely read; but at least, like Hume, he made mere analytic compilation obsolete.

Both Hume and Robertson show that it was beginning to be difficult to retain history as the servant of authority; Voltaire and Gibbon make it evident that, in truth, the battle of rationalism was in its large outlines already won. With Voltaire a new epoch in historiography genuinely begins; the critical spirit takes possession

of its kingdom. Providence is banished from the stage, passion is analyzed by the cold weapons of reason, civilization becomes the phenomenon to be examined. He realized the significance of documents. He understood that the worth of history is dependent upon the worth of testimony. If he hardly grasped the category of time, at least he understood the category of space. With him Christianity is no longer the central theme but simply an incident in universal history. His books are no longer either pamphlets or funeral orations but genuine attempts to explain the phenomena he encountered. He speaks like an analyst and not, like Bossuet, as a prophet. He banished the supernatural from history and thereby brought it down from the clouds to earth. If the *Essai sur les mœurs* is today inadequate, it is only because he pointed out the path by which its inadequacy might be made known. If we do not accept his view of Louis XIV as he conceived it, it is still in large outline his method of interpretation that prevails. Voltaire wrote history as a humanist, and he had the insight, accordingly, to see that nothing human was unworthy of his examination. The people as well as the court, the lawyer as well as the soldier, the man of letters not less than the priest—these enter for the first time into the necessary ambit of his scheme. A critical philosophy of history would doubtless have come without Voltaire; but no man made its coming more certain or its success more assured.

If the ambit of Gibbon was in a sense less wide, the character of his achievement was hardly less notable. The *Decline and Fall* is one of those books literally beyond praise; and it may be said with confidence that no work of its amplitude has ever been less touched by the corrosive hand of time. Here let us note that, proceeding though it did from a political reactionary, it is yet a manifesto of liberal rationalism. The famous epigram, "I have described the triumph of barbarism and religion," connotes not merely a history written in cold antagonism to religious belief but the first genuine attempt to describe Christianity as a sociological phenomenon; and if we should perhaps be kinder than Gibbon to the theologians and ecclesiastics upon whom he heaped contumely, no scholar will be found to dissent from his annihilating confutation of his religious critics. This rationalist philosophy of history, moreover, is accompanied by a sense of the continuity of history that was epoch making. No one had

seen before Gibbon that the Augustan empire fell only with the fall of Constantinople. Criticism has overthrown his attack on Byzantium; it has shown that, as in his chapters on Mohammedanism, he sometimes used untrustworthy sources. The answer to all such attacks is that he wrote before the nineteenth century, and that he made a large part of the achievement in method and outlook of the nineteenth century possible. He rescued a vital field of research from those who had made it the plaything of theological passion. He gave to that field both a new definition and a new perspective. With Voltaire he gave to the secular interpretation of history the letters of credit which assured to it its future empire.

VIII. For Catholic and Lutheran Europe the Reformation meant an autocratic and centralized state; and if the special experience of England and Holland required there different political institutions, nevertheless the economic ideology of Europe is, after the Reformation, different only in the varying degrees of its intensity. The decomposition of the mediaeval system, the rise of manufactures, the development of commerce, the new possibilities opened up by geographical discovery and the use of the mariners' compass, the growth of banking—all these meant, in their total and complex impact, the rise of national economic systems. It was inevitable that the state should seek to control this evolution. An increase of national wealth not only meant an increase of national power; it afforded a basis for taxation which fostered the political ends the state sought to serve. The history of economic policy before Adam Smith is thus very largely the history of a deliberate effort by the state to foster economic development. Burleigh's encouragement of maritime power in England, the relation, in Amsterdam, of the bank to the city council, the ordinance of Louis XIII permitting wholesale merchants to attain a patent of nobility—all these show clearly that the importance of the new industrial phenomena was clearly apparent to the mind of the government. The colonizing activities, the economic policies of Cromwell and Colbert, simply illustrate the same method in more intense form. The governments of the *ancien régime* became the patrons of capitalism as a means of promoting their own authority.

The conditions created by the Reformation inevitably sharpened this atmosphere. Catholic supremacy had meant the imposition of a social

and moral discipline which made ethical assumptions constantly conflict with everyday behavior. The true Christian life, in that view, was the life of the monk; and accumulation of wealth was hardly regarded as a praiseworthy ideal. Asceticism of this kind was obviously unfavorable to individual initiative. It left the average man in the grip of a dual view of the universe which contrasted worldly advantage with the religious ideal. Luther destroyed the dualism by making the internal voice of conscience the criterion of external conduct; as Sebastian Franck said, the monastic ideal became with him a world ideal. That was already an aid, since the voice of conscience is conveniently various in the precepts it adumbrates. It was Calvin more than any other thinker who provided the new capitalism with the ethic of which it had need. His view of man as the guardian of what God has given to him and his insistence upon occupation as a "calling," fulfilment of which is service to God, enabled the view to be justifiably taken that accumulation of wealth is a religious exercise, and that association with the business man in that task—the gospel of hard work and low pay—is an avenue of salvation. Calvinism, in a word, provided a way of transition from a society in which economic life was dominated by religious conceptions to one in which, with the growth of secular power, religious conceptions should be expelled from economic life. Not, indeed, until the threshold of the early nineteenth century was the evolution at all fully accomplished. But the basis of its coming is clearly present, once economic growth was made the basis upon which the national state was to wax strong.

Mercantilism is essentially the system which expresses, in its first large phase, the result of the decay in religious discipline which the Reformation marks. It is impossible to define it in a phrase. Rather it expresses a series of tendencies which in any given country exist in varying degrees of emphasis. The mercantilists were never a school, and they did not completely agree with themselves nor teach a consistent body of doctrine. In general it may be said that they were the proponents of four large principles. They insisted on the value of possessing a large supply of the precious metals. They preached the superiority of foreign trade over domestic and, as an almost necessary inference, of industries which manufacture from, over industries which supply, raw materials. They argued, finally, that the state

can by its deliberate policy artificially promote these desirable ends. Nor is it difficult to see why these views should have seemed desirable. To a generation which had seen the advent of a money economy, the virtual identification of wealth with bullion was natural enough. To one, further, which saw the rise of great centralized monarchies and an immense growth in the number of officials, a sense of the power of the state was inevitable. To the state itself industry seemed a natural field to foster, and the prohibition of imports a wise policy to pursue, since each led to an increase of revenue and thus an increase of the striking power of the nation. So, also, to use colonies as the reservoir of exports, to prohibit even them, so far as possible, from manufacture, was to strengthen national economic power. Mercantilism, so regarded, was a natural expression of the actual policy of the time. Traders urged it upon governments to protect themselves from foreign competition; and governments accepted it as the obvious path to the enhancement of their authority.

Mercantilist doctrine is, in fact, characteristic of any period in which liberal theories are at a discount. For liberalism tends to a cosmopolitan outlook, and the day for that standpoint had not yet come. The doctrinal expositions we have are essentially practical treatises intended for a particular state, and considering mainly some special and immediate national advantage. Thus the currency revolution effected by the discovery of the American silver mines led to a spate of treatises on money, some of them, like the *Réponse au M. Malestroit* of Bodin, very partially mercantilist in outlook. But in the *République* Bodin expresses the typical views of the system. He is strongly in favor of state intervention in industry, and eager for high duties on foreign imports. In England, almost simultaneously, the author of the *Briefve Concepte of English Policy* went further and actually proposed not merely the exclusion of all foreign goods capable of being made at home, but also a prohibition upon the export of raw materials abroad. Within thirty years Antonio Serra was striving, in his *Breve trattato*, to use the prosperity of Venice and the poverty of Naples as proof that the industrial state on mercantilist principle is definitely superior to the agricultural state.

The volume of this literature in the seventeenth century is enormous. In France Montchrétien has secured an enviable reputation for

his *Traité de l'économie politique* (1615) in which the name of the science appears for the first time; but the book is in fact a mass of wholesale and unacknowledged plagiarisms from Bodin and his own contemporary Laffemas. The need for colonies, the importance of government control, the danger of economic individualism, are all emphasized with enthusiasm. Thomas Mun in England did a similar work. Laying down with passion the thesis that the business of the state is so to arrange the balance of trade as to attract money from abroad, he indicated a host of expedients to this end. Mun is merely typical of a number of writers, like Misselden and Pollexfen, who urged the same views.

By the middle of the century, however, there are signs that faith in mercantilism is beginning to waver. The remark of Colbert that protection is a crutch with which the sound limb dispenses is well known. While Sir Josiah Child was a mercantilist upon colonies and the rate of interest, he did not object to the export of bullion, supported the Navigation Acts upon political rather than economic grounds, and saw that an import trade is the unavoidable result of foreign commerce. Charles Davenant, at the end of the century, while mercantilist upon colonial policy, went much further toward liberal ideas in other directions; and Sir William Petty, in this, as in much else, a mind of profound originality, laid down a body of doctrine which links him directly with Hume and Adam Smith. Indeed it may be said that by the end of the seventeenth century England possessed in Barbon, Dudley North and the anonymous author of the remarkable *Considerations on the East India Trade* (1701) an economic outlook which denied at their root all the fundamental mercantilist notions.

France, moreover, was tending in the same direction. The disastrous policy of Louis XIV resulted in a general economic impoverishment, and even in an age when criticism was dangerous, protest against mercantilism began to make itself heard. Boisguillebert was the ablest of the dissidents from the traditional form of mercantilism. In his emphasis on the importance of agriculture he combined what may be called an agrarian mercantilism with elements of a newer doctrine. While he believed in high import duties for the products of industry, he was specially concerned with the problem of improving the position of the agriculturist. He approved not only import duties on wheat but

also export bounties. He was freely cited by the physiocrats because of his insistence upon the primary importance of agriculture. But in fact his approach to the problems of economic policy was quite different from that of the physiocrats. Vauban's analysis, however, was built rather on social sympathy than upon economic insight. But he too has a profound sense that the mass of governmental regulation inhibits rather than promotes prosperity, and his proposed scheme of taxation would have wrought a revolution in the economic policy of the state. The fact, moreover, that a moral philosopher like Fénelon can urge the necessity of freedom of trade shows clearly that liberal ideas were gaining ground.

The reason is not far to seek. Industrial policy in the preceding age had been made subordinate to military policy; or, as with the suppression of the Edict of Nantes, to considerations which totally disregarded secular well-being. The zest for adventure was unsuccessful, and the economic theorists began, like those in matters of religion and politics, to look to freedom from governmental interference as the key to social good. Exactly, in other words, as experience of the state or church as an organ of repression led Voltaire and Diderot, Montesquieu and Holbach to look to religious toleration and political liberty as the ideal, so did the mistakes of the state as the arbiter of commercial destiny lead to an emphasis upon the desirability of *laissez-faire*. The movement did not come all at once. After Vauban and Boisguillebert there is a period of stagnation which lasted for almost thirty years; for men like Dutot and Melon were still set by the ancient ways, and Montesquieu, although an advocate of economic liberty, nowhere attempted systematic exposition in the economic field. It was not until the rise of the physiocratic school that a liberal policy was developed as a complete philosophy of economic life.

The originator of the physiocratic doctrine was Quesnay, the physician of the Pompadour; but the school of thought he may be said to have founded had wide ramifications. The elder Mirabeau, Mercier de la Rivière, Dupont de Nemours and Baudeau are only the most notable of the direct disciples; but Turgot and Condorcet were deeply influenced by them. Their power over public opinion was never great, and it may be said to have ended when Adam Smith embraced the most valuable part of their teaching in an outlook wider than theirs. But they were the first group of thinkers system-

atically to study economic problems in terms of liberal principles. They had, as Dupont said, "a body of doctrine defined and complete, which clearly lays down the natural rights of man, the natural order of society, and the natural laws most advantageous to men united in a society." Their starting point was the belief that there are natural laws underlying the social world as final and as real as the laws which explain the physical universe. These laws men must obey in order to secure the advantages of social organization. With their special economic doctrines, as with their insistence upon the value of benevolent despotism, we cannot here deal. What is important is their insistence that maximal production is the effect of the greatest possible liberty to trade. They object, accordingly, to all restrictions upon labor; and their defense of the individual's right to acquire property is, at bottom, an argument that interference with individual effort is an injury to national prosperity because in hindering ownership it removes the basic stimulus to production. Their view of society as essentially an aggregate of individuals, each of whom is not merely pursuing his own self-interest but is also the best judge of that self-interest, naturally led them to regard government as a necessary evil, whose interference should be limited to protecting the rights of one from invasion by another. The ideal government thus becomes that which has least concern with its citizens. Enlightened self-interest, in their view, was much more likely to result in social good than the system of minute regulation and hampering restriction. Obviously this outlook represents the deep distrust of men who had known mercantilism by grim experience. Their view of society was built upon the political and psychological considerations which made Locke the messenger of liberation to the eighteenth century. Their attitude to nature showed the impact upon them of the scientific revolution. For them reason can discover the laws of the social world, and no government can disregard the relentless operation of these laws.

They came in their due hour; though Germany still remained, with rare exceptions as at Baden, tied fast to the ancient ways. For in Germany economic theory was essentially a by-product of public administration and not an independent criticism of state policy. It arose out of the teaching of economics to men who were to devote their lives to some form of administrative effort. The cameralist tradition,

as it is called, was thus inevitably an effort to clarify, and not to criticize, the work of government. The professors of economics were themselves civil servants, holding chairs founded to enable them to offer practical instruction. The result is a body of ideas intended especially to explain how administration can be best conducted to the best advantage. Such men could hardly be expected to belittle the sphere of the state; they were concerned with practical questions of tariffs, taxation, forestry, mining. Mercantilism naturally expressed the categories of thought they required; and all the leading German cameralists of the seventeenth century accepted, like Bornitz and Schröder, the traditional doctrine. Nor does the eighteenth century see much change. Justi and Justus Möser were unaffected by the new ideas; and though Zincke and Sonnenfels show gleams of a fitful temper, their order of thought was hardly in advance of that of Davenant or Melon. The dominant school was made by the physiocrats and their allies. They showed that the individualism which the Reformation portended had at least extended its empire to the economic sphere. Hutcheson and Hume, the physiocrats and Adam Smith, when they propounded the system of natural liberty, were only completing the triumph of that critical rationalism which was born of the revolutionary experience of the sixteenth century.

For it may be said without exaggeration that after the eighteenth century the policy of the

state is above all distinguished by the subordination of its power to industrial need. The recognition is consequent that the commercial life of the nation is the supreme manifestation of its activity. The central theme of political policy thus became the supply of what commercial life required for its full expansion; and to this all effort in the community was increasingly subordinate. The religious discipline to which the individual had been formerly subject could then be replaced by an ethic derived predominantly from economic circumstance. The source of social regulation was no longer supernatural authority but rational utility. The system of natural liberty, moreover, was discovered to result in a harmony of interest between all members of society. This gave to liberalism the character of a doctrine entitled to optimism because, since the individual was thus simply able to realize himself most fully, no limits need be set to the bounds of progress. Laissez-faire as a program was the logical counterpart in social philosophy of Protestantism in the religious, of free inquiry in the intellectual, sphere. Each came as a herald of freedom to an age hampered by obsolete principle. Each definitely enlarged by its victory the area in which the human spirit was free to voyage in self-discovery. But each in its adventure was to find that the abolition of unnecessary social restraint was not identical with the creation of necessary social control.

HAROLD J. LASKI

VIII

The Revolutions

I. It is perhaps a fallacy to consider the revolutions of the latter half of the eighteenth century, the American, the French and the industrial, as manifestations of a common revolutionary spirit working to lay the foundations of modern society. Certainly the changes brought about in these years were complex enough, and sufficiently dependent on earlier changes, to make the historian cautious. Moreover the example of the eighteenth century writers themselves must serve as a warning against too inclusive generalizations. Yet there does seem to be in the western world at this time a very definite *Zeitgeist*, a common attitude distinguishable both in thought and in action. Saint-Just gave this attitude profounder expression than he doubtless knew when he told the Convention, "le bonheur est une idée neuve en Europe." Happiness for everyone was attainable, not in some distant heaven, but here and now on this earth. If old habits, old beliefs, old institutions stood in the way of this happiness for the common man they must be altered. One cannot look into the files of an eighteenth century magazine, or study the life of an eighteenth century man, without becoming aware of this acceptance of innovation. Experiment, in fact as in idea so foreign to the Middle Ages, had by the eighteenth century become a commonplace.

This change appears most obviously in what we may call the revolution in things. It was prepared by the remarkable progress of the physical sciences. Newtonian physics were brought by Voltaire to the level of the *salon*, and very ordinary men came to see the material universe ruled not by mysterious divine laws but by discoverable natural laws. These laws were, it is true, immutable; but once discovered, man had but to adapt himself to them to find himself perfectly at ease with his environment. Moreover was it not obvious that man, too, was a part of the material universe? Much of eighteenth century work in the social sciences is an endeavor to find for human society laws of nature, not in the sense Grotius gave the phrase, but in the sense Newton gave it. Both physics and chemistry progressed throughout

the century by the work of careful investigators, and toward the close of the century Lavoisier gave to chemistry its modern form. The biological sciences did not attain the same completeness; but even here the work of so typical a man as Buffon is very important. For Buffon, although he was hardly a biologist in the modern sense, did help enormously to popularize the study of "natural history"; and from that study there emerged a clearly evolutionary concept of organic life, and a geology which Buffon himself had difficulty in reconciling with the book of *Genesis*. Academies and the learned societies increased their scientific activities, and all sorts of men busied themselves with scientific experimentation, and sometimes made valuable discoveries. Franklin, of course, comes to mind at once.

Franklin was not only a scientist but an inventor. His work is an example of the utilitarian purposes to which these studies were turned. Invention was a necessary element in the industrial revolution, and the work of Arkwright, Watt, Cartwright and other English inventors helped to determine the rise of manufacturing in England. Yet this familiar role of invention in the English industrial revolution is of less importance in the study of eighteenth century thought in the social sciences than is often assumed. The middle class in France and in England did indeed furnish most of the writers on social questions, and determined the nature of their thought; but this middle class had been enriched not by the industrial revolution, which had just begun, but by the earlier development of commerce. The literature of protest against the conditions brought about by the industrial revolution grew up much later, and began rather in France, where the industrial revolution was late, than in England, which was very early industrialized. The real importance of mechanical inventions in a study of the social sciences in the eighteenth century lies rather in their psychological than in their industrial effects.

For these inventions, applied to a host of domestic purposes, helped to give to the average

man something of the modern attitude that nature exists to be conquered. In 1783 the brothers Montgolfier sent their first balloon aloft, and two years later Pilâtre de Rozier achieved a very modern death attempting to cross the English channel in the air. In less spectacular ways land travel was speeded up enormously through improvement in road making, in coach building and in the organization of posts. Agricultural methods were improved, and household conveniences increased. In fact the eighteenth century was quite sure that it had already attained a state far ahead of previous ages. The carping conservative existed, of course, as he always has, but the feeling was quite general that man is a creature of great possibilities and that there is no limit to his ability to improve the conditions of human life on this planet. The idea of progress, discernible clearly enough in seventeenth century writers like Descartes and Bossuet, is fully developed in a host of eighteenth century writers such as Turgot, Rousseau, Condorcet and Adam Smith. The idea is even given a biological application in Lamarck's theory of evolution, where the will does wonders with environment. Need it be pointed out how far this perfectible man is from the fallen man of Christian tradition?

From improvement in material environment it is an easy step to improvement in political and social environment. The revolution in institutions was no less marked than the revolution in things. The characteristic form of this revolution up to the very end of our period, however, was not popular but autocratic. Most of the writers with whom we are concerned lived under a benevolent despotism. Frederick the Great, Catherine and Joseph II are stock examples, but George III and Louis XVI, each in his own way, were trying hard to be benevolent despots. Voltaire, for all his humanitarian enthusiasms, could hardly conceive any effective agency for reform other than a wise ruler. Modern knowledge made possible great improvements in the condition of the people, but the people themselves were too ignorant or too selfish to take the philosophic view, and reforms must be made from above. The king was no longer to rule by divine, but by philosophic, right.

Benevolent despotism, however, could not long contain the reforming spirit of the age. Too much, for one thing, depended on the personality of the despot, and the supply of

despots was irregular. Moreover in France and in England the well-intentioned efforts of the crown met from the start with an organized opposition supported by what may be called the popular party. Reforms were usually made piecemeal, and often disturbed established interests without pleasing those supposed to benefit from the reforms. The career of Turgot in France shows how uncertain a reforming monarchy could be. Finally these reforms were essentially paternalistic, and gave insufficient outlet for the energies of the rising middle class.

That class was now in most of western Europe thoroughly prepared to fend for itself. For generations it had been growing richer. Less tempted than the nobles to spend money on mere luxuries and often indeed forced into plain living by Calvinist or Jansenist principles, the middle class had profited by the expansion of trade to secure a position of economic power more advantageous in many ways than that of the old landed nobility. And following what seems to be a law of politics, it was seeking to gain a political power corresponding to its economic power. With increasing wealth came also increasing opportunities for education. Pedagogy itself, in spite of Rousseau and Pestalozzi, made little progress in the eighteenth century. Most middle class boys received a thorough classical training, which later bore fruit in a host of revolutionary Brutuses and Mucius Scaevolus. What was really important, however, was the opportunity for a continuous adult education afforded by the great increase in newspapers, periodicals, lending libraries and reading clubs. Much of the literature of the time, from Defoe, the English essayists and their French and German imitators on to the encyclopaedists, is written for the middle classes and, if the Marxian implications of the phrase can be forgiven, is definitely class conscious. In a hundred plays and novels the besotted and vicious nobleman is outwitted by the virtuous commoner.

In the American and French Revolutions the middle class achieved political power. In England the revolution began with Wilkes and Middlesex, though it did not translate itself into institutions until 1832; yet the slowness of the change ought not to blind us to its reality. England, like the rest of the western world, underwent a political revolution in the eighteenth century. Fashions in historical writing have occasionally obscured the fact that the American Revolution was a social revolution as

well as a civil war. Certainly, however conservative a Hancock or a Washington may have been, the repercussion of the American Revolution in Europe had anything but conservative results. The French Revolution, however, remains the pattern of the modern democratic movement, and the focus of the ideas with which the middle class began its rule. A republican form of government, universal suffrage, equality before the law, universal education, abolition of government and other monopolies in trade, and the career open to talents—these, if not actually realized, were all a part of the program of the first French Republic. "Liberty, Equality, Fraternity," became a symbol in which the more idealistic aspirations of the people could be centered; patriotism became a fact which satisfied their more practical aspirations. Modern democracy had found its institutions.

The revolution in ideas is no less real than the revolution in things and the revolution in institutions. The textbooks have labeled this movement the rise of romanticism. Now there is no great objection to assigning to the word romanticism ethical and philosophical implications which cover the whole field of human thought, although clearer thinking might have resulted from limiting the word to aesthetics. But granted that romanticism is an attitude toward life, it was surely not the attitude of all the revolutionists. What was really new in late eighteenth century thought was an extraordinary blend of rationalism and romanticism. Rationalism employed the methods of logic, refined and improved by generations of thinkers, to demonstrate the weaknesses of existing institutions, and to construct in theory institutions without weaknesses. Romanticism brought to these theories a faith and an animal energy without which they could hardly have moved men to action. Romanticism in the age of revolutions was thus the complement of rationalism. The calculating Bentham and the mystic Wordsworth are both revolutionists; and sometimes, as with Rousseau, who wrote not only the *Nouvelle Héloïse* but also the *Contrat social*, the same man is both romanticist and rationalist. The two attitudes were soon to part company in the history of thought; romanticism, finding more emotional satisfaction in ancient irregularity than in modern uniformity, was on the whole to turn conservative, while rationalism, newly christened utilitarianism, was to continue on the side of the innovators. But the point for us to

notice is that in the latter half of the eighteenth century the rationalist temper, seeking to translate into life the orderliness of the thought process, and the romantic temper, seeking an ecstasy beyond thought and sometimes beyond life, did collaborate in the attack on the *ancien régime*.

In such a historical setting it is not surprising that what we now call the social sciences should have attracted active minds. There seem to be good reasons for believing that in the latter part of the eighteenth century more intellectual energy was spent on the problems of man in society, in proportion to other possible concerns of the human mind, than at any other time in history. Such a statement is perhaps an exaggeration, and certainly is not susceptible of proof; but it ought to focus attention on the extraordinary place occupied by the social sciences in the life of the time. Hardly anyone seems free from sociological preoccupations. French literature is almost too perfect an example. It is hardly possible to find among French writers between 1750 and the revolution one who, like Villon, like Ronsard, like Racine, has wholly an artist's interest in his fellow men. Any literary form could be adapted to the purposes of the reformers. The public found political allusions in Voltaire's very classic dramas; moralists took over the novel, cleansed it of its picaresque impurities, and used it to persuade men to social virtue; and lyric poetry, which seemed of little use to the sociologist, was abandoned. The difference between pure literature and literature inspired by social purpose will be very clear from the slightest comparison of a work like Longus' *Daphnis and Chloë*, which is a real idyl, and Bernardin de Saint-Pierre's *Paul et Virginie*, which is propaganda in favor of the state of nature. But English literature is hardly behind the French in its preoccupation with the problems of man in society. Gray is almost alone in his elegiac indifference to so light and necessary an evil as politics. You may extract bits of Rousseau from *Tom Jones*; and as the century goes on, lesser novelists like Bage, Holcroft and Mrs. Inchbald are nothing but propagandists; Johnson was a moralist and a Tory, and certainly wrote no pure literature. In Germany literature from Gleim and Gellert to the young Schiller, though its main concern may be to nourish intensity of feeling, is certainly more moralistic in tone than lyrical.

The point we have made as to literature, that

it kept branching out into the social sciences, could be made in the same way about other fields of human activity. A few names will have to suffice: Frederick the Great, chiefly a king, but also a *philosophe* and author of an *Anti-Machiavel*; Turgot, civil servant and economist; Mirabeau, great lord and economist; d'Alembert, mathematician and moralist; Tucker and Price, clergymen both, the first an economist, the second a political philosopher; Priestley, chemist and political philosopher; Franklin, merchant, scientist, inventor and philosopher; Burke, at once a politician and a great political thinker—perhaps the most surprising combination of all. So far indeed did this invasion of other fields of thought by the social sciences go in France that the word *philosophe*—a word on everyone's lips at the time—though it can hardly be translated into modern French, is probably most nearly rendered *sociologue*.

Whether this extraordinary flowering of the social sciences came about through the revolutionary tendencies of the age, or whether these revolutionary tendencies came about through the flowering of the social sciences, are questions that can be finally answered by faith alone. But it may be pointed out that both the advancement of the physical sciences and the rise of the middle class determined, if not the existence of the social sciences, at least their character and development. The human intellect had mastered astronomy, physics and chemistry by discovering the uniformities or laws behind the apparent diversities of nature. What more natural than to attempt by the same means to discover the laws of politics or economics? Then, with the growth of the middle class in wealth and in education, there came an inevitable increase in interest in man as a social and political animal. For the middle class was too large to gain its experience of politics directly by personal contact, by struggle and intrigue. It was obliged to learn indirectly from books. Moreover it could not act as a body from direct knowledge, nor could it cohere, as could any oligarchy, through the intimate relations between its members. The middle class had to learn its politics from the printed page and the lecture platform; and its politics, in order to be workable, had to be translated into theories, symbols, a ritual. Finally, since fashion is hardly less influential in intellectual than in other human activities, once men of reputation got to writing on social and political

matters others took it up. The French *salon* proved peculiarly adaptable to serious discussions about the natural goodness of man, the corrupting influence of bad governments, the relative virtues of monarchy, aristocracy and democracy and similar topics. There is no doubt that the social sciences were enjoying a boom.

Three general remarks may be made about the vast body of writings resulting from this interest in the social sciences: it is predominantly French; it is almost always politically partisan; it is comparatively undifferentiated as between separate branches of the study of man in society.

Great Britain contributed much to all the social sciences in the period, and economics is not too unjustly called in origin a British science. Yet France possessed in the eighteenth century a reputation as the center of thought and fashion which she has since lost, but which no single nation has acquired. Even English thought was spread largely through the western world in French translation or in French adaptation. The social sciences were cosmopolitan enough both in the origins and in the outlook of the men who studied them; but that cosmopolitanism has a tinge as definitely French as the manners and the clothes of the time.

Much of the political writing of the period is frankly polemical, even when it appeals to general principles, as with Voltaire; but even where the writer protests his dependence on the law of nature or on scientific principles, political purpose comes out clearly enough. A Hume may indeed maintain a skepticism about the customary explanations of the origins and continuance of civil society; but his philosophical skepticism only leaves him the freer to insinuate conservative preferences in practical matters. Most of the writers of the time, however, are definitely on the side of innovation. The *philosophes* in France were accused by their enemies of being a sect, and at the very least they were a political party of advanced views. English economics was revolutionary enough in its attitude to certain established institutions. In fact Burke is almost the only genuine conservative among the great political thinkers of the period.

What is most surprising to the student of today in eighteenth century social science is its lack of differentiation into fields—political theory, jurisprudence, sociology, social psychology, anthropology and so on. This may appear at first to denote a surprising versatility

in individual writers. Condillac is a psychologist and also an economist; Adam Smith is an economist and holds a chair in moral philosophy; Montesquieu is jurist, historian and sociologist; Rousseau an educational psychologist, a political theorist, even a bit of a theologian. But the difficulty goes beyond individual versatility to the works themselves. Just how is *De l'esprit des lois* to be classified? or *Dei delitti e delle pene* (which is obviously too humanitarian to be strict jurisprudence) or Raynal's *Histoire des Indes* (which is hardly history at all)? The fact is simply that specialization in the social sciences had not yet set in, and that we shall have to bear this in mind in judging what the late eighteenth century contributed in this field. And for the purposes of a brief review of the leading writers we shall have to employ a very simple classification: first, political writers, a necessary catch-all term to cover the very undifferentiated nature of the field; second, economists, a fairly definite group of men; third, historians, who again are pretty well earmarked as such.

Montesquieu's *Esprit des lois* (1748) is the natural point of departure for a study of the political writers of the age of revolutions. It quickly attained enormous prestige, it obviously had an influence on political action, especially through its emphasis on the doctrine of the separation of powers, and it remains today a political classic. What seems to us now its chief virtue is its attempt to explain existing laws in terms of the whole of human life. Montesquieu finds in any given state a set of laws; these laws have, he believes, been brought into being by the complex play of natural causes—the size of the country, its climate, the religious beliefs of the people, their wealth, their commerce, their morals, their political constitution. By a careful study, then, of these observable facts in the social life of a people he hopes to be able to show how their laws are adapted to their character and circumstances. Once he has succeeded in showing how this adaptation came about, he is in a position to suggest ways of making it more perfect, of providing for a given people a better set of laws. But he will not make the mistake of spinning out of his own brain an ideally perfect set of laws, suited to all times and to all places. By going to facts instead of to philosophy, he has become convinced that all legal systems are relative to particular, and varying, conditions of life. Although there is implicit in it a kind of

historical fatalism, the *Esprit des lois* none the less approaches the study of law from the point of view of the sociologist, the psychologist and the historian; its method is essentially inductive. In these ways it is still a very modern book.

But Montesquieu had the greatest success with his contemporaries at precisely the points where he seems false to his method. No scientist of course believes that facts take care of themselves, even in induction. But in true induction hypotheses seem to grow out of a collaboration between observed facts and the mind of the observer. Montesquieu's famous classification of governments, which fills the first eight books of his work, shows evidence of a desire to fit facts into categories arrived at *a priori*, often for purposes of propaganda. There are three forms of government, republican, monarchical and despotic, which have respectively as principles virtue, honor and fear. Now this is inferior, both as to observation and as to logic, to Aristotle's famous classification. Moreover a despotism is merely a kind, even though a bad kind, of monarchy; Montesquieu is here clearly inspired by a partisan zeal to show Frenchmen the horrors of despotism and to prevent the French monarchy from turning despotic. He is, in short, being politically partisan. The well-known analysis of the English constitution, the principle of the balance of the three powers, executive, legislative and judicial, and the virtues of a mixed government, where king, nobles and people also contrive to effect a balance of power, is another example of Montesquieu's failure to avoid stiff, absolute, *a priori* categories. This part of his work came to reinforce Locke, and the two together have been tremendously influential; yet the modern social scientist will see in this rather an attempt to mold facts to a theory than a true induction. That the theory, in spite of its incompleteness, should have proved fruitful both in practical politics and in political thought need not surprise us. The eighteenth century had a way of jumping at conclusions and then acting upon them. But the importance thus given to the conclusions forced critics to a renewed and more careful study of the problem. The history of the doctrine of the separation of powers in the United States is a case in point.

The political thought of Voltaire is scattered throughout his vast work, in his histories, his *Dictionnaire philosophique*, his satires and his correspondence. He never wrote a systematic

treatise on government, and it is idle to seek to found an orderly system upon his "chaos d'idées claires." But his influence at the time was so great that the historian of opinion cannot neglect him. He is the great theorist of the benevolent despots. He has no faith in the common man, and is neither emotionally nor intellectually affiliated with the democratic movement. Yet he did in practise become its ally and, after his death, one of its patrons. Voltaire helped the democratic cause and incidentally the growth of the social sciences, first, by his steady opposition to intolerance and bigotry, second, by his willingness to criticize any established institution in the light of reason, and finally, by his admiration for the liberal elements in the English constitution. He is particularly important as one of the chief sources of inspiration for the anticlerical movement which has since played such an important role in European politics.

Rousseau is the third of the triumvirate upon which writers have often thrust responsibility for the French Revolution. The *Contrat social* (1764), though it no doubt served as a handbook for revolutionists, is as much a permanent addition to political thought as the *Esprit des lois*. The common criticism that men never did at any moment in history get together and sign a social contract is of course absurd. Rousseau never thought they did. The *Contrat social* is an unusually penetrating attempt to answer a fundamental question in political psychology: Why do men accept the authority of society? Rousseau employs what is after all only a figurative expression—the contract—to explain that in the long run men do what a given society wants them to do because by an act of faith they have identified their individual wills with the will of the society. Rousseau probably did think of this general will of society in metaphysical terms, as partaking of the reality which the Platonist assigns to universals. But the empiricist may well accept much of his analysis. For whether the group, and hence the group-will (general will), be real or not, the individual in his relationship to the laws and to the rulers of a group does almost always personify, or even deify, the group, and hence puts his obedience, even though unconsciously, on a religious basis. A man will accept willingly the constraints set upon him by society because he feels these constraints are set by a superior and a better will which is yet somehow the expression of something within him. At bottom

the psychology of obedience to civil authority is the same as the psychology of obedience to religious authority.

The revolutionists, of course, found much more than this in the work of Rousseau. The general will came, at least in popular opinion, to be identified with the will of the majority, a confusion against which Rousseau himself had carefully guarded. Much of the phraseology of the *Contrat social*, like the famous sentence "L'homme est né libre, et partout il est dans les fers," lent itself to the uses of political radicalism. A great deal of what Rousseau had taken pains to show could apply only to the small city-states of antiquity and to their direct democracy was given a modern application. The most revolutionary of Rousseau's doctrines, however, that of the natural goodness of man, is not to be found in the *Contrat social* but in the *Discours sur l'origine de l'inégalité parmi les hommes* (1753), the *Nouvelle Héloïse* (1760) and the *Emile* (1762). Man, regarded simply as a creature of animal appetites and passions, is essentially good. If these appetites and passions now waste themselves in corruption, it is because civilization, with its laws, its institutions, its religions, its arts and sciences, has turned them into evil ways. Even the much praised master faculty of man, his reason, has aided in leading him astray. His heart is his one true guide. Rousseau, though he did not originate this doctrine, is clearly in the eighteenth century the center from which it spread. It became in the hands of some of his successors a thoroughgoing denial of the value of thought and an exaltation of the value of feeling, and as such is the leading theme of the romantic movement. Its political consequences are clear and important. In its mildest form it is merely a belief in the rightness of the plain people, and hence in the ordinary machinery of democracy; for the common people are less corrupted by manners, education and luxury, and hence are nearer nature. In its extreme form it amounts to anarchy. For if men's instincts, pure and uninfluenced by civilized corruption, are good, then we must trust each man to follow his own instincts, and not corset him with unnecessary and vicious laws. Moreover the doctrine of natural goodness brought support to egalitarianism. Goodness is in the natural man a matter of feeling; but men obviously differ less, even in the light of nature, in their capacity for feeling than in their physical and intellectual capacities. Equality in this sense seems almost a fact.

Rousseau's doctrine of the natural goodness of man led him toward individualism; his doctrine of the social contract, whereby the individual submerges his will in the general will, led him toward collectivism. He never seems quite able to choose definitely between these alternatives. In the same chapter of the *Contrat social* (bk. ii, ch. iv) he says that the social pact gives the body politic absolute power over all its members, but that individuals possess natural rights which they must enjoy as men; that though each citizen under the pact alienates all his powers, goods and liberty to the community, he alienates only the part of these which concerns the community; that, however, the sovereign is the sole judge as to what concerns the community. He probably leans somewhat to collectivism. Both collectivists and individualists appealed to his work for support, but on the whole his practical influence has been in favor of collectivism (the Jacobins, early socialism).

Most of the men commonly grouped together as the *encyclopédistes* wrote a great deal on social problems, although the great encyclopaedia itself does not devote much space to the social sciences. Although these men gave personal interpretations of their own to many questions, they none the less stood together on important issues, and it will not be unfair to select one of them for special treatment. Holbach's *Système social* (1773) is a work obviously inferior to those we have hitherto considered. It is full of bad rhetoric and special pleading and raises far more problems than it attempts to solve; or rather it solves them with a phrase, "let reason rule." Holbach starts with a definitely utilitarian psychology. Man is neither bad nor good; he is born with an instinct to seek pleasure and avoid pain. If he is allowed to follow these instincts, that is, to pursue enlightened self-interest, he will so act that his own pleasures, and therefore those of his fellow men, are maximized. The science of politics is simply the application in society of this simple moral principle.

Society is based on a social pact, actual or assumed. Holbach is not quite sure as to who are the parties to this contract. At first it is a contract between individuals to make a society; then it becomes a contract between the individuals governed and the government, or sovereign, set up by the previous contract. But in both cases Holbach retains the Lockian idea that the individual promises obedience,

and society or the government promises protection of property and liberty, and that where this protection fails the contract is broken and the individual absolved from obedience. In the state so set up the form of government does not matter, and the old dispute as to the respective virtues of monarchy, aristocracy and democracy is an idle one. In the past they have all three proved bad, anyway. What does matter is that the civil laws of these states should correspond to natural laws, and that men should obey not other men but the law. This law of nature, about which there has been so much vain dispute, is very simple; it is simply the psychological law of enlightened self-interest. If men are properly brought up they will follow this law and, one would think Holbach obliged to conclude, will not need any government.

He does not, of course, so conclude, for he was hardly a logician. When he does abandon rhetoric for something like a concrete program, he is far from iconoclastic. Men have in the past always been the dupes of their vicious rulers; history is a long record of crimes and failures. Holbach, like all his fellows, attacks monarchy under the name of despotism. But he is no great admirer of the English constitution; the balance of powers is a balance of selfishness. Indeed in the latter eighteenth century French admiration for the English constitution was vastly lessened by the attack of the rationalist *philosophes* and by heightened national self-consciousness. Some form of popular government is desirable, but Holbach hastens to make clear that he does not mean that the ignorant and irresponsible masses should have political power, but only the merchant, the artisan, the professional man. Here again there comes in the class consciousness of the bourgeoisie. He leans toward individual liberty, even to laissez-faire, for the individual best knows his own interest. The book concludes with a reversion to the idea of the benevolent despot, and an exhortation to princes to let the light of reason prevail.

It should be clear that much of this radical thinking about nature, the rights of man, and the evils of monarchy touches doctrines we now call socialistic. Indeed Montesquieu himself writes that "the state owes to every citizen an assured subsistence, proper nourishment, suitable clothing and a kind of life not incompatible with health" (*Esprit des lois*, bk. xxiii, ch. xxix). Rousseau in the *Discours sur l'inégalité* blames private property for the fall from the state of nature, although in the *Contrat social* he

accepts it as necessary in the modern world. Yet the great political writers of the century do not in the main attack the institution of property; and the socialism to be found often enough in the work of lesser men is moralistic and utopian. There was as yet no large urban proletariat in France, no factory system, no proletarian class consciousness. Therefore there was no driving force behind socialistic ideas. That these ideas, in content essentially the same as socialistic ideas in the nineteenth century, should have cropped up in an environment apparently unsuited to them, makes an interesting problem in the relationship of political speculation to political practise. Here, apparently, ideas feed upon ideas, instead of upon social and economic necessity.

Since one must single out one of these socialistic writers for further analysis, it will be well to take Morelly, so little known in his own time that his chief work was attributed to Diderot, but since acknowledged by socialists as one of the founders of their faith. The *Code de la nature* (1755) constructs from the true principles of morals an ideal society. Man is gifted with so many varied desires, and nature herself is so generous, that if the fruits of this earth were not monopolized by the few through the institution of property, everyone could always have what he wanted. If someone had already eaten up the peaches, the hungry man could turn to the pears. In the state of nature these idyllic conditions obtained, but the first law givers permitted private property and gradually all existing evils grew up. Man, at bottom good, has been corrupted by institutions. Morelly next draws up a code to restore the state of nature, though it is not clear how men are to be made to accept the code; he admits the code could not be accepted in his own day.

This ideal constitution has three fundamental laws: there is to be no private property save in objects of personal use; each citizen is supported by the state; each citizen will labor for the state according to his strength, his talents and his age. There are in addition an elaborate territorial and family organization on a decimal system, provisions for public buildings and city planning, and a scheme for education and police. The whole suggests Fourier's idea of the *phalanstère*, but Morelly lacks completely the psychological subtlety of Fourier. What is particularly interesting in the *Code*, however, is a whole section (pt. ii) in which Morelly tries to find a basis in

fact for his theories. Community of property, far from being a mere deduction from abstract principles, is, he says, a historical fact. Primitive communities did not have private property, and in our own day the Red Indians show how a people can pursue agriculture under a tribal community of goods. Early legislators corrupted European nations by codes of laws which permitted inequality; the best and most socialistic of these early codes, that of Lycurgus, was precisely the one that lasted longest. This appeal to experience may seem to us rather inadequate; but the important thing is that Morelly felt obliged to make it.

Almost all the currents of political speculation in eighteenth century France converge in Jacobinism; yet because Jacobinism was the creed of a political party and hence translated into action, and because its leaders formulated their ideas chiefly under the pressure of parliamentary necessity, historians of political thought have left the subject to general historians like Taine or Aulard, who are perpetually attacking or defending the party instead of analyzing the creed as objectively as possible. Now Jacobinism as a form of political philosophy, though composed of elements familiar to the student of eighteenth century thought, is, like all true compounds, a new element, and not to be understood as a mere sum of its parts. This philosophy is best sought in the writings and speeches of such leaders as Robespierre and Saint-Just. Rousseau's concepts of the general will, the social compact, the rule of virtue have been transformed into a democratic ritual. The metaphysical rights of man become the Declaration of the Rights of Man and are incorporated into the French constitution, where they promise protection to property, freedom of speech and other tangible things. The revolutionary government, said Robespierre, is "the tyranny of liberty against despotism." The opponents of the Jacobins are wrong, and one cannot be free to do wrong. To guillotine them is to prevent them from doing wrong—that is, in a sense, to free them. The general will is not the will of all, but the will of all who possess virtue—in theological terms, all who are in a state of grace. The external signs of this state of grace are outlined by Robespierre and Saint-Just: the unified nation state; a republican form of government; public worship of the Supreme Being; obligation of all to serve the state, particularly in war; simplicity and decency of manners; the absence of extremes of wealth and poverty, but with private property

and private commercial enterprises; universal education and hence universal suffrage, save of course for non-Jacobins. Robespierre's own standards of conduct were far too puritanical to have been applicable to French life, even had his political methods been wiser, and the failure of the Jacobin republic was inevitable. But the essential ideas of Jacobinism have influenced French and even other governments ever since.

All the representatives of French political thought just considered were hostile to the established order. Political thought in England, where political issues could be fought out in Parliament instead of in the press, and where social issues seemed less serious than in France, was less one-sided. Conservatives like Blackstone and Johnson were even more read than radicals like Price and Priestley. Those who are fond of distinguishing national differences will easily find other ways in which English political thought of the period had characteristics of its own. In method, however, there is little difference between eighteenth century French and English political thinkers. Both schools, indeed, went about the study of the social sciences in much the same way—a fact to which we shall later return.

David Hume was in politics a conservative; he was, however, a rationalist and a polite anticlerical. Had he been born a French citizen, circumstances might have overcome his temperament and made him a reformer like his friends the *philosophes*. But in England fashion was not unkind to conservatives. He never produced a systematic treatise on politics, but his *Political Discourses* (1752) contain some very interesting speculations. He thinks that politics may be reduced to a science, and a mathematical science at that. But the sort of scientific laws of politics his study afforded him may be judged from this one: "That an hereditary prince, a nobility without vassals, and a people voting by their representatives, form the best monarchy, aristocracy and democracy" ("That Politics may be Reduced to a Science" in *Essays Moral and Political*); and in another essay ("Of Civil Liberty") he admits that, even were the art of reasoning more perfect than it is, our paltry three thousand years of history do not provide us with enough materials to make scientific conclusions.

Hume points out how in his England each party has built up a philosophical system "to protect and cover that scheme of actions, which it pursues" ("Of the Original Contract" in

Essays Moral and Political)—an anticipation of the modern psychologists' "rationalization." He attacks both the social contract, which he says is ridiculous if, as with Locke, it pretends that all government at all times depends on the voluntary consent of the governed, and the divine right of kings, which he shows can mean only that the divine power has instituted kings as it has instituted constables, and that therefore the authority of both king and constable is equally divine. We have finally left as an explanation of why men obey in civil society only mere custom or habit, which is to say little more than that men obey because they obey. Hume's politics, in spite of scattered aphorisms which are often very penetrating, is as bankrupt as his epistemology. He did, indeed, construct an ideal state ("Idea of a Perfect Commonwealth" in *Political Discourses*), which he would not establish by any violent means but which he is so sure is in accordance with the laws of politics that once established it ought to prove as near immortal as anything in this world can be. Yet even where Hume appears most abstract and rationalist, he is often, like so many eighteenth century writers, curiously near to facts. He proposes, for instance, a "court of competitors," composed of defeated candidates for his senate who shall have polled one-third or more of the votes of their constituencies, and gives this court power to criticize and impeach senators. We must remember that Hume wrote in the infancy of the party system, when most publicists considered parties as troublesome factions. He has gropingly seized the idea of "His Majesty's Opposition."

Of the school of writers who defended the English constitution as the best type of government actually realizable, the Genevan Delolme will serve as the best example. His *Constitution of England* (1775) was for a long time almost as popular in England as Blackstone's *Commentaries*, and illustrates the essentially conservative, if Whiggish, view that the eighteenth century compromise in English government deserved to stand as a pattern for the political efforts of mankind. Delolme starts with the important assumption that "it is upon the passions of mankind, that is, upon causes which are unalterable, that the action of the various parts of a state depends" (introduction). His book is an elaborate, and often acute, analysis of the machinery of the English government seen as an elaborate device for neutralizing the evil passions of men by a system of checks and

balances which allow the good passions as free play as possible. He sees the great part the lessons of experience have played in English politics, and insists that experience, not abstract reason, must be our guide in such matters. But though he claims to follow English lawyers and derive his "rights of Englishmen" empirically (bk. i, ch. iv), it is hard to distinguish these rights as he formulates them from the celebrated rights of abstract man. What is most interesting in De Lolme's work is his complete failure to see the real significance of the facts he has carefully observed. The party system, the true nature of the royal prerogative, the union of "executive" and "legislative" powers in the cabinet, all escape him. Writing at the time of the Wilkes case and the quarrel with America, he could describe the English political system as perfectly adjusted, and could completely ignore the symptoms of grave social unrest evident in the rise of Methodism. These errors, like so many similar errors in eighteenth century political thought, lie not in a wilful ignorance of facts, but in a preconceived and dogmatically maintained interpretation of the facts.

Jeremy Bentham, in spite of his radicalism, appears as a thoroughly British political thinker, presumably because he attacked with violence the concepts of natural rights and social contract appealed to by the French revolutionists. His first work, the *Fragment on Government* (1776), however, exposes these fallacies in the work of a countryman, Blackstone. *The Principles of Morals and Legislation* (1789) is a working out in these fields of the great principle of utility, already announced in the previous work. Bentham's most active period of political writing lies in the nineteenth century; but though his radicalism on political questions increases with age, his methods of thinking do not change.

Men, for Bentham, seek pleasure and avoid pain. A careful observer, studying the actual physiological and psychological effects of the various forms of pleasure on man, can rank these pleasures in a sort of hierarchy and then, with the aid of mathematics, devise a scheme of human life whereby the maximum number of men would enjoy the maximum amount of pleasure. Existing institutions can be subjected to criticism by comparing them with this scheme of things; the critic can discover just wherein society now fails to provide the greatest good of the greatest number.

This principle of the greatest good of the greatest number, explicit in Bentham, is implicit

in most of the other utilitarians of the time—Paley, Butler, Hume, Holbach. Bentham, however, pursued into all manner of fields—criminology, jurisprudence, constitutional law, economics, education—the guiding principle of utility. In many of them his work has been very fertile in practical results. Yet curiously so wise a guide as utility led to the same goal as that most foolish of guides, natural rights. Bentham's program was much the same as that of the French revolutionists—a republic, universal manhood suffrage, annual parliaments, abolition of the House of Lords, the ballot, codification of the law, secular education and freedom of speech and trade. The explanation of this coincidence is partly that the defenders of natural rights maintained that these were rights to pursue happiness and avoid pain without diminishing the happiness or increasing the pain of one's fellows—that is to say, they based rights on utility. But a more profound explanation is that the real criteria by which both Bentham and his natural-right opponents judged human actions were the same. Bentham carefully appraised the value of human pleasure, on the whole much as a thoughtful Protestant would do. Faced with the bewildering complexity of the world, he tries to simplify it and make it a neater and a nicer place. This is exactly what the French reformers tried to do. Both have a set of values which serve to clothe the abstractions "utility" and "natural right"; and these values are essentially those of the Protestant reform. Utility may seem at first sight, and in the hands of some thinkers may really be, a principle close to common sense and worldly things; in the hands of Bentham, in spite of the many tangible changes it helped to bring about, it becomes quite unworldly and unreal.

Bentham, like the Jacobins, would hold the individual to the moral and political compulsion of a republic of virtue. One hesitates, if only out of respect for tradition, to call him a collectivist; but he was certainly no anarchist. The privilege of providing modern Europe with the first political anarchist was, indeed, reserved for the land of political compromise and illogic. William Godwin, more courageous than his French masters, followed up his assumptions to their bitter and logical end. His *Enquiry Concerning Political Justice* (1793) is based on a touching, if un-English, faith in reason and in the perfectibility of man. Men's passions are under the complete command of their intelligence; their intelligence is capable of receiving the com-

mands of reason; the commands of reason are always exactly fitted to the necessities of the moment. Therefore it follows that only reason, freely working within his mind, should command a man to do something. That a man should oblige his fellow man to act according to reason is superfluous; that a man should oblige his fellow man to act contrary to reason is unjust. Similarly no man should be obliged to obey a written law which, if it applies to the case, is superfluous and which, if as is most likely it cannot apply to a case uniquely a combination of circumstances, is unjust. Therefore there must be no interference by force with a man's will; we may, indeed we must, reason with him, and then of course he will act rightly. Godwin has considerable trouble explaining how so many men in his day have lost this complete possession of reason. He is not very clear on the subject but implies that so many human actions became habitual that men ceased thinking about them, and a partial atrophy of reason set in. The remedy is to set our minds at work continually revising our beliefs. In the present order, of course, vicious institutions keep many men poor and ignorant.

Godwin's anarchism is complete. The family naturally falls before it. Private affections cloud the intellect, and prevent our treating all human beings alike according to the dictates of reason. "The abolition of the present system of marriage," he believes, "appears to involve no evils" (*Political Justice*, 4th ed., 2 vols., London 1842, vol. ii, bk. viii, ch. viii, p. 244). Even voluntary cooperation, as in musical concerts, seems evil to him. Naturally the state, which implies a cooperation in part involuntary, cannot stand. Godwin finds that all government—monarchy, aristocracy, democracy—rests upon the fraudulent assumption by certain men of the power to substitute their wills for the free thought processes of their fellows. The pretensions of a representative assembly to decide matters with the authority of its constituents are ridiculous. Godwin ends by reducing government to a minimum of purely local policing necessary to prevent the evils of anarchy (the word anarchy having bad connotations for him, he does not use it to describe his own system). *Political Justice* may of course be dismissed as the culminating absurdity of the method of deducing a political system by abstract logic from unexamined premises. The present renewed interest in the book, after a century of neglect, is hard to ex-

plain. Perhaps our social scientists are unusually anxious to profit by the mistakes of their predecessors; perhaps Godwin's philosophic anarchism flatters underlying human desires increasingly unattainable in the modern world.

The criticism generally leveled against American political development, that it has not produced political speculation of a high order, is certainly not true of the eighteenth century. If only because of the necessity of working out the relation between the federal and the state governments, the American experiment would be important for the political theorist. Out of the mass of interesting pamphlet literature on the rights of the colonists, the rights of man and the proper form of the new government there emerge particularly the names of Hamilton, Jefferson and John Adams. One general caution must be observed in any study of these men. America has never quite been Europe, and Jefferson himself proves the existence of an opposition even at this time. But Europe was not yet condescending, and the superiority which certain Americans cherished was one based on their nearness to nature—to nature in the eighteenth century sense, the mother of philosophy and natural right. One cannot of course leave Braintree out of John Adams, or Piedmont Virginia out of Jefferson; but as political thinkers and especially in a rapid survey such as this, they are best seen as contributors to a body of thought common to the western world. They belong quite simply to the age and company of Blackstone and Bentham, Mirabeau, Condorcet and Beccaria.

John Adams, both as a politician and as a political thinker, presents certain obvious and often remarked analogies with Burke. For neither of them can there be any question of genuine apostasy from political beliefs founded in conscience. Adams' *Defence of the Constitutions of Government of the United States of America* (London 1787-88) and his *Discourses on Davila* (written as newspaper articles in 1790, published in book form, Boston 1805) stand as the assertion of these beliefs, and it is idle to fling at him bits of his writings of the seventies in apparent contradiction of them. These pamphlets, together with some of the writings of Calhoun, are perhaps the best examples to be found in American thought of formally theoretical political speculation. With their apparatus of classical learning, their wide range of reading among the proper philosophers from Plato on, their clear-cut generalizations, their aristocratic

prejudices, and their curiously personal quality which can perhaps be described, in a villainous paradox, as a sort of cold gusto, they seemed to the nineteenth century rather old-fashioned. Today, now that some of their qualities are again in good repute, they seem less remote.

Adams here is definitely a conservative. Men are not born equal; fitness in each sort of human activity is the gift of the few. Obviously even government should be conducted by the fit. His well-known definition of an aristocrat, unfortunately too long to quote (letter to John Taylor, *Works*, ed. by Charles Francis Adams, 10 vols., Boston 1856, vol. vi, p. 457) is an excellent example of his style and thought. History shows him that democracies can be as tyrannical as absolute monarchies, in that they make possible the tyranny of the majority over the minority. The people are quite as given to luxury as their betters; luxury is self-indulgence, and the footman is as fond of gin, porter and pudding as his master is of burgundy and ortolans (*Defence*, vol. vi, p. 94). He admires the English constitution, and believes in the necessity of checks and balances, of which he discovers eight in the American constitutions. We cannot follow further into the details of his thought, of which the foregoing must serve as examples. The roots of his conservatism (if conservatism be taken to mean a distrust in the capacities and intentions of the ordinary man) lie probably in Calvinist Christianity; yet in some ways Adams' conservatism seems less built out of mystic religious experience and more out of common sense and a politic acceptance of the world than Burke's. In method, certainly, Adams is far from the abstract, geometrical school denounced (and partly invented) by Taine. He has at command much apt and picturesque detail; his generalizations are often made with dogmatic warmth, but they are never empty and abstract.

Hamilton stands today in symbolic opposition to Jefferson. Yet his most important political writings, the *Federalist* (1788), in collaboration with Madison and Jay, and the letters in defense of Jay's treaty, signed "Camillus" (1795), do not as directly contradict Jefferson's fundamental political philosophy as do Adams' pamphlets. Hamilton, however, was directly identified with the American business and financial aristocracy, and helped to formulate their characteristic attitude in politics, an attitude which has on the whole been that of American conservatism ever since. Briefly Hamilton may be said to pass over so lightly the assumptions of the natural rights

school that one might almost assume he accepts them, and to devote his chief attention to getting the government to working in the traditional ways of a strong and efficient plutocracy. This does not detract from his originality or his sincerity. Hamilton supplies what Adams lacks, a certain sense of political contingency. The *Federalist* is of course a classic piece of controversial writing, and one which really seems to have decided the controversy. But it is much more than that. It is one of the best examples in the history of thought of the interaction between political speculation and the necessities of actual politics. One realizes, watching Hamilton struggling to adapt them to his needs, what currency such generalizations as the separation of powers, rotation in office, government by the consent of the governed, the social pact, natural rights and others of the same sort had at the time. In the reaction against the view of the American constitution as struck off from the mind of man, we have perhaps gone too far. The fact is that the American constitution, like the French constitution of 1791, was deliberately framed, and framed in a society where interests, habits, traditions and ideas were competing in extraordinary freedom. The *Federalist* otherwise could hardly have been written.

Jefferson has left even less systematic political writing than Hamilton. Nevertheless his state papers and his correspondence form a body of political thought which, despite the derivative nature of its basic assumptions, has a high degree of originality. Jefferson had a universal curiosity and an experience of all sorts of knowledge, a feat still possible in his century. He had the gift of the catching phrase (witness the Declaration of Independence) and of political aphorism. But there was something else. Jefferson's political philosophy was on the whole that of the French theorists before the revolution—he trusted the common man, thought men more nearly equal than not, especially in virtue, distrusted a strong central government, in which the common man could not directly participate, and which would therefore soon become an oligarchy, and wished the necessary minimum of government to be conducted in small local units. But this philosophy he arrived at by observation of the farming communities about him. He never believed it workable in Europe. "It is my principle that the will of the majority should prevail . . . this reliance cannot deceive us as long as we remain virtuous . . . When we get piled upon one another in large cities, as in

Europe, we shall become corrupt, as in Europe, and go to eating one another as they do there" (letter to Madison, Dec. 20, 1787). America was the elect, not of God, but of philosophy.

This feeling of America's mission, which has colored, sometimes garishly but never meanly, American patriotism ever since, gives substance and reality to Jefferson's abstract principles. The America in which he hoped to realize them is dead. The central government is stronger, and certainly more ambitious, than most European governments, local government is devolving on city managers, and the urban population outnumbers the rural. But the principles remain, and we still hold certain truths to be self-evident. Would Jefferson, were he alive? The answer is not easy, for his was a surprising and complex personality, and seems uneasier in others' formulae than in his own. The lover of his fellow men could write: "The tree of liberty must be refreshed from time to time with the blood of patriots and tyrants. It is its natural manure" (letter to Col. Smith, Nov. 13, 1787).

II. Italy continued to the end of the eighteenth century in a state of political helplessness. Her numerous petty governments were usually backward and often cruel; and yet the Italian people did not of their own initiative produce a political revolt, as did the French, nor an intellectual and literary revolt, as did the Germans. It is one of the numerous difficulties faced by the intellectual historian in his attempt to relate his subject to social and political history that the contribution of Italy to eighteenth century thought, and particularly to thought in the social sciences, should none the less be considerable. Perhaps the best explanation is that Italian thinkers were an *élite* writing under French and English influences, and anxious for a European, rather than an Italian, reputation.

The Marquis Beccaria was both the pupil and the teacher of his French masters, the *philosophes*. His *Dei delitti e delle pene* (1764) was soon translated into the principal European languages, was incorporated into the program of radical thinkers everywhere, and actually did influence such practical reformers as the Englishman John Howard. Beccaria's condemnation of torture and secret accusation in criminal trials, and his demand for reasonable and clear penalties in place of the extreme and therefore frequently evaded punishments com-

mon even in English law of the time, have now been universally translated into practise. His condemnation of the death penalty has been less universally accepted. His book is a mixture of fashionable rhetoric on natural rights, of equally fashionable humanitarian sentiment and of effective reasoning. And for a pioneer work in criminology it is remarkably sound. Beccaria was one of the first to make clear that the prevention of crime is the purpose ultimately served by the punishment of crime.

The book has pretensions to be more than a treatise on crime and punishments. Beccaria pins his specific attacks on abuses and his suggestions for reform to a system of generalizations about society that mark him as an eighteenth century man. The laws which are born of the social compact exist for the sake of "la massima felicità divisa nel maggior numero" (ch. i). Men are moved by self-interest, and therefore yield up to society only that portion of their liberties necessary to secure peace and tranquillity in society. The sovereign created by the compact can wield a power measured by the aggregate of liberties so yielded up. The right to punish—to deprive a man of all his liberties—is thus limited to the minimum exercise calculated to restrain men from breaking the social compact. All punishment beyond this is unjust and contrary to nature. Again, to take a representative passage: "For a punishment to obtain its effect, it is sufficient for the evil of the punishment to exceed the good of the crime, and in this excess of evil must be calculated the infallibility of the punishment and the loss of the good anticipated from the crime" (ch. xv). Although Bentham would have objected to phrases about rights and compacts, he must have accepted not merely Beccaria's practical conclusions but much of his intellectual approach.

The Neapolitan, Gaetano Filangieri, although he lived under what was perhaps the worst of Italian governments, and was even employed by that government, produced one of the most radical of eighteenth century political treatises. His *Scienza della legislazione* (1780-85) set out to continue and improve the work of Montesquieu. The *Esprit des lois* had been too much concerned with what the laws were; Filangieri's work set out to show what, with due regard to historical and geographical differences, as well as to the principles of reason, they ought to be. There is little originality in the book; its interest lies in the completeness with which Filangieri applies to all the subjects he con-

siders—economics, general jurisprudence, criminal law, education, religion—the test of conformity to reason. He is no anarchist and no collectivist, and he is guided in his specific suggestions for reform by no fundamental philosophical assumptions beyond the characteristic eighteenth century utilitarian psychology. His radicalism comes from the application to each problem of a practical sense which is yet far from common sense. He is the extremist among the theorists of benevolent despotism. Yet Filangieri abounds in occasional bits of wisdom, and now and then gives way to sensible doubts. He has an interesting passage (bk. iv, ch. xxxviii) on the method of the social sciences, where he points out that in chemistry elements may be isolated, weighed and measured, but that in politics, even though it may help to assume that causation operates as in the physical sciences, we cannot apply the methods of mechanics and mathematics.

The Enlightenment in Germany was rather a moral and philosophical movement than a political one, and those who reacted against it, like Kant and even Herder, belong rather to the intellectual history of the nineteenth century than to that of the eighteenth. Germany was still a collection of states under the remains of the mediaeval empire, she had suffered an unbelievable setback in the Thirty Years' War, her upper classes were slavish imitators of French court manners, and her middle classes prosperous enough, or custom ridden enough, to accept the political order without complaint. The Enlightenment is indeed a movement parallel with the similar rationalist movements in France and in England; but in Germany it is singularly superficial and devoid of explosive power. German political thought continues seventeenth century natural-rights philosophy (which gets reduced to a sort of scholasticism) and grafts upon it certain importations from the French, and an insistence on the omnipresence of the state which is explicable enough in terms of German political experience, but which hardly jibes with some of the premises of the natural-rights philosophy.

Of these philosophies of the Enlightenment Christian Wolff may be taken as a type. His *Vernünfftige Gedanken von dem Gesellschaftlichen Leben* (1721) and his *Jus naturae methodo scientifica pertractum* (1740-48) form a system based on the equality of men before nature. Differences in rights are acquired, the results of historical growth. By nature, however, all men

have the same rights and the same duties. No man has the power to interfere with other men. By nature all men are free (*Jus naturae*, ch. i). The aim men pursue in the state is *Vollkommenheit*, perfection or self-realization, which can never be attained, but toward which men are gradually moving. Here are liberty, equality and progress all in black and white. But for Wolff these are apparently the necessary and philosophic abstractions with which one approaches the study of politics. His actual program is purely a theory of the benevolent despot, and gives an extraordinary scope to state action. One cannot even say that he is consistently in accord with the rationalist philosophers who would use state action to create a new society based on logic and not on history. He is for the old guilds, limitations on the number of apprentices, and against freedom to emigrate. He defends censorship of the press, and even goes so far as to admit a mild and humane use of torture in criminal trials. Wolff's theories of the origins of society take on the fashionable form of the compact. The government created by the pact, however, is bound to conform not only to the laws of nature but to the fundamental laws agreed upon when the society was formed. If these laws are violated, the people have the right of resistance. From Wolff's whole political writings it is perhaps not unfair to conclude that the natural-rights formula had no necessary connection with revolution; it had become so universally accepted that it had no practical implications.

The beginnings of the peculiarly modern and literate type of nationalism may be seen in German literature of the latter half of the eighteenth century. In political writing the followers of the French had never been unchallenged. Justus Möser, who spent his whole life as lawyer and judge in the little Westphalian town of Osnabrück, is only one of many eighteenth century publicists in Germany who repudiated the new cosmopolitanism. Möser wrote an introduction to the history of Osnabrück, in which the value of social, as opposed to purely political, history is emphasized, as well as numerous political essays, the *Patriotische Phantasien* (1778). He is a traditionalist, a conservative who believes in defending the good old Germany of the soil. He detests modern reformers who would abolish history in the name of reason. In point after point he opposes the individualistic and utilitarian tendencies of the time, even when they are turned into humanitarian channels.

With the natural rights of illegitimate children, for instance, he has no sympathy. Society owes them nothing, for they menace the most sacred human institution, the family. Möser, if he insists that history and not logic is the first teacher of the political philosopher, can nevertheless hardly be called a realist. For he finds in history a vague ideal of Teutonic freedom, antedating the abuses of the Middle Ages—the freedom of German tribesmen uncorrupted by inequality of property holdings.

There are, however, political thinkers who seem even more completely opposed than these German patriots to the normal way their contemporaries went about the study of politics. No account of eighteenth century thought would be complete without the mention of two men who yet scarcely fit any of the commoner generalizations about it—the Neapolitan, Giambattista Vico, and the Irishman, Edmund Burke.

Vico, whose great work the *Principi di una scienza nuova intorno alla natura delle nazioni* (1725-44) was little known until the nineteenth century, is often given credit for founding the philosophy of history, a form of intellectual activity highly developed in the days of Hegel and Comte, but held by professional historians in disrepute until the present moment, when it bids fair to become popular again as a methodology or synthesis of the social sciences. In this field Vico developed a theory of the flux and reflux of civilization through different societies—Greece, Rome, the Middle Ages—which is elaborately worked out, with a somewhat scholastic fondness for the figure three. Vico finds three sorts of government which succeed each other in order of time in all societies: the divine, when men make gods to rule them; the heroic, when heroes, demigods, rule them; and the human, when intelligence rules them and they devise laws and the idea of civil liberty. This is the height of civilization a given society can attain. Reflux begins, men become overcivilized, and the third form reverts to the first. Whether Vico thought this process was an eternal repetition, or whether he believed each cycle had benefited from the previous ones, is not wholly clear. Vico also figures as a forerunner of Montesquieu in the sociological approach to the study of law, though it is to be doubted if the French philosopher could read the *Scienza nuova*. And there is, especially in Vico's careful study of Roman law and early Roman civilization, a great deal to justify this statement. But perhaps Vico's general philos-

ophy, and in particular his theory of knowledge, is more important even for the social scientist than the results of his investigations into historic fact, which were partly invalidated by his peculiar superstitions, such as his fondness for triads, by his religious mysticism and by his lack of tools for research. His theory of knowledge, however, definitely anticipates the nineteenth century reaction against Cartesianism which was to be so important for the social scientist. Vico refuses to accept the Cartesian *cogito ergo sum*, and the resultant tests of truth by clarity and of scientific method by mathematics. He identifies *knowing* with *creating*. God alone has perfect knowledge, since God alone created all things. But of the feeble knowledge vouchsafed man the best, apart from divine revelation, is that which corresponds to the field in which he exercises his creative power. Now man has created the society he lives in, though he has not created the universe about him. Hence our best knowledge is not of mathematics and the mathematical sciences but of history and the historical sciences. It is not abstract speculation that is valuable, but the hard fact, the individual; it is not the superficial similarities of things the thinker should pursue, but the fundamental differences. Real knowledge is a conquest to be won literally by the sweat of one's brow. Vico's whole work, in the very confusion and trouble into which his restless desire to get beyond the smoothness of thought into the roughness of things causes him to fall, is a striking contrast to the cocksureness of much eighteenth century thought.

Although Edmund Burke never wrote a formal treatise on politics, there are more political ideas in his speeches and letters, and especially in his pamphlets on the French Revolution, than in most treatises. He is, however, a difficult man to get into a few words. His complexity is one of depth as well as breadth, and sets him off even more completely than Vico from his century. Of his breadth there is sufficient evidence in the fact that political thinkers of such different allegiances as the liberal Morley, the conservative Hugh Cecil and the laborite Harold Laski should all find in his philosophy important elements of truth. Of his depth the sober analysis whereby in 1790 he predicted the Napoleon of 1804 should prove an adequate example. Burke denied the existence of rights and defended political expediency; but he was no utilitarian. He distrusted the common man and believed in aristocratic rule; but he was not an

unimaginative standpatter. What lies at the bottom of Burke's thought, however, makes him in 1790 almost a heretic among publicists; he is a Christian, a pessimist and no believer in progress. He lived too much in the world, of course, not to have uttered at times words which seem to contradict this. But any thorough study of his whole work will bring out these fundamental conservative beliefs. To Burke man was a fallen creature, not to be redeemed on this earth; to give him freedom was to unleash the brute. Civil society and law, tradition, custom, habit, loyalty operating within it almost miraculously make men behave far better than a psychological study of the isolated individual would lead one to think possible. But society represents at any moment a delicate equilibrium between rest and unrest, and if you disturb it, as the French are doing, to rewrite all the laws according to reason, you destroy the equilibrium, and the brute in men, which the old laws and the old loyalties have put to sleep, is awakened and will have no respect for your new and perfect laws. Burke's pessimism enabled him to see things most of his contemporaries were too hopeful to see, and his literary skill has embodied his observations in aphorisms scattered throughout his works. This, and a certain moral earnestness that seems to underlie even the ravings of the *Regicide Peace*, may account for the respect which men of such different political faiths have felt for the writings of Burke.

III. Economics, even in the latter half of the eighteenth century, was hardly a special science. Most men who wrote on economic subjects also wrote on other subjects, or incorporated their thoughts on economics into political or literary works, as, for example, Montesquieu, Filangieri and Hume. The originality of the *Wealth of Nations* is partly one of form; it is the first complete systematic treatise on economics in the modern sense written by a thinker of the first rank. Of course the day has long gone by when Adam Smith had no predecessors and few contemporaries. Mercantilists, cameralists and physiocrats (*supra*, p. 121-24) may now be admitted to have contributed much to the methods, the material and even the theories of the most scientific of the social sciences. In the confusion of writings on economic subjects in the eighteenth century it is extremely difficult to say, "This went into the making of classical economics, and this did not," or, "This is orthodoxy, and this is heresy." That dull

mercantilist, Steuart, has interesting anticipations of Malthus on population; Italian mercantilists such as Genovesi do useful work on monetary theory. We shall therefore mention hastily some British thinkers who are perhaps better catalogued as "forerunners of Adam Smith" than as members of already existing schools, and then turn to the founder himself.

Mandeville, though he fell into the shocking make-work fallacy, yet brings forward in his *Fable of the Bees* (1705; enlarged ed. 1714) a theory that private vices make public virtues, that is, that men working selfishly in their own interests will unconsciously cooperate in working for the public good. Josiah Tucker, dean of Gloucester, wrote many pamphlets on politics and economics. It would appear from the point of view of a later period that he kept his politics and economics in separate parts of his mind, for he was both a conservative and a free trader—a combination, however, not as surprising in eighteenth century England as it would have been in 1840. As a Tory he thought the American colonists' arguments about their indefeasible rights sheer nonsense, but as a free trader he came to the conclusion that the colonies were a nuisance and should be cast off. Wars for the sake of trade, he predicted, would one day seem as absurd as the crusades. Hume in his economic writings is as clear-sighted and as fragmentary as usual. He sees at once the fallacy of the mercantile position on the accumulation of money, an attempt which is as ridiculous as trying to keep water above its natural level. He emphasizes the stock of labor as the true source of wealth. His monetary theory is surprisingly sound, and even his often criticized remarks about the stimulating effects of rising prices are true in themselves. Smith himself owed much to Hume, whom he knew and revered, as well as to his teacher Francis Hutcheson, to whose chair of moral philosophy at Glasgow he succeeded. The latter's influence upon Smith was no doubt largely in the field of philosophy; nevertheless Hutcheson mixed economics with ethics, and in his *System of Moral Philosophy* (1755) has familiar ideas on the division of labor, value and interest. He makes a clear distinction of the sort Smith was later to make between value in use and value in exchange (*System*, vol. ii, p. 53).

The *Wealth of Nations* (1776) shares with the work of the physiocrats the honor of elevating economics from a narrow study of the mechanism of commerce to a genuine discipline,

to a study of the production and distribution of wealth. In a sense everything of importance Adam Smith wrote has been supplanted. In the more complicated reaches of economic theory—including value, rent, money, population and much else—the successors of Smith have gone far beyond him, and even the so-called “classical economists” from Ricardo to J. S. Mill differ from him in many ways. But Adam Smith did bring out clearly many ideas about the division of labor, the distinction between value in use and value in exchange, between wages, interest, profits and rent—to give merely a few examples—which have since become commonplace. He brought out clearly in his treatment of the details of economic life certain principles whose political, and even scientific, influence is still very great—notably that of the non-interference of government in business (summarized, though not by Smith himself, as *laissez-faire*) and that of free trade. Finally, although his language is the literary tongue of his century and although he therefore hardly appears as an inventor of a special scientific terminology, he marked out much of the ground which economics (and especially economics as distinct from sociology) has since occupied. For these reasons he deserves the salient position among economists that common opinion has always given him.

Adam Smith serves as well as lesser men to point the commonplace that thinkers depend on their physical environment. Just as Quesnay, country-bred and citizen of an agricultural nation, stressed land as the ultimate source of wealth, so Smith, citizen of a great commercial country already stirring with the industrial revolution, stressed labor as the source of wealth. The labor of artisans and business men seemed to the physiocrats inferior and even “sterile” labor; to Adam Smith the capitalist and the business man are integral parts of the machinery for the creation of wealth. But our beliefs depend partly on the beliefs held by our contemporaries, and of this somewhat neglected commonplace Adam Smith is also a good example; moreover the question of Smith’s affinity with other eighteenth century thinkers, and especially that of his ideas of a natural order with similar ideas held by other workers in the social sciences, is one that is very close to the aims of this survey.

Some commentators have discovered an antinomy between the *Moral Sentiments*, where Smith founds morality on human sympathy, and the *Wealth of Nations*, where he founds eco-

nomics on human selfishness. Such a view is unjust, for to Smith sympathy and self-interest are simply complementary aspects of natural human activity. Sympathy is a kind of inverted self-interest that serves to check us automatically in our relations with our fellow men. When men act as they want to, their actions, isolated and anarchical though they may seem at first sight, are really in accord with an underlying scheme of things, a natural order established by Providence. The careful investigator into men’s economic activities, for instance, will find beneath the apparent disorder of hundreds of different enterprises, the higgling of the market, the conflict of thousands of interests, the clear principles and admirable order so well described in the *Wealth of Nations*. Governments, for lack of true knowledge, have often interfered with this process. But they have added real and harmful disorder to the merely surface confusion of natural economic life, and have thus prevented the designs of Providence from working themselves out completely. Therefore governments should in general refrain from interfering with the economic activities of their subjects. In the next century critics like Cliffe Leslie held that Smith’s belief in a natural order was arrived at *a priori*, that it was a part of the false thinking common to his century, and that it therefore vitiated somewhat the enormous amount of direct observation embodied in the *Wealth of Nations*. As this is a point which involves in general the methodology of the social sciences in the eighteenth century, we shall return to it later. But it may be remarked here that Smith himself did not hold as rigidly to the principle of *laissez-faire*, nor insist as warmly on absolute, immutable economic laws, as did some of his nineteenth century successors.

The most interesting book on economics published in France in this period is Richard Cantillon’s *Essai sur le commerce* (1755, but written about 1730). Cantillon was an Irishman who had made a fortune in banking in Paris, and his little book shows an extraordinary grasp of practical detail as well as much speculative ability. Though Adam Smith refers to it, the book was little known until Jevons rediscovered it and held it up as the most complete of the forerunners of the *Wealth of Nations*. Cantillon’s opening sentence is in the best style of the eighteenth century, clear in definition and compressed: “La terre est la source d’où l’on tire la richesse; le travail de l’homme est la forme qui la produit; et la richesse en elle-même n’est

autre chose que la nourriture, les commodités et les agrémens de la vie" (pt. i, ch. i). Note that in that one sentence Cantillon emphasizes equally the role of land and labor (which neither the physiocrats nor Adam Smith did), and that he gives the modern, as opposed to the mercantilist, definition of wealth. Cantillon's theory of value (pt. i, ch. x) shows the same merits of brevity, apt illustrations and ability at generalization. He concludes that "intrinsic value" is measured by the land and labor involved in production, allowing for the goodness or product of the land and the quality of labor. He then distinguishes between "intrinsic value" and market values. He arrives at these generalizations by studying Brussels lace, for instance, and he has constructed elaborate statistical tables to show how the amount of labor involved in lace making, together with the cost of material, etc., about equals the price. Cantillon has interesting passages anticipating the study of the role of the entrepreneur, is good on money, and extremely good on international trade. The essay was apparently written about 1730, nearly half a century before the *Wealth of Nations*. This fact suggests that, if the influential works in the history of thought are dependent on social and economic conditions for their success, the human mind itself is perhaps somewhat less limited, and may sometimes steal a march on its environment.

Most of the continental economists of this period may be classed as physiocrats or mercantilists, and need not here be considered. But a word should be said about Condillac, who in his *Le commerce et le gouvernement, considérés relativement l'un à l'autre* (1776), though not otherwise very original, does anticipate the psychological theory of value. We value a commodity because of the use we think we can get from it. Scarcity gives a commodity greater value, and abundance gives it less, but this value is based less on its actual scarcity or abundance than on the opinion we form of its scarcity or abundance (pt. i, ch. i).

IV. The greatest historians of the eighteenth century are included in the school usually called "rationalist" (see Section VI). But there are other, and as far as the later writing of history goes, more important ways of approaching history than that exemplified in the elegance and speculative acuteness of Hume or Gibbon. By 1800 great progress had been made in the accumulation and criticism of source material, and in

the writing of social, as opposed to merely political, history.

The *Acta sanctorum*, going back in conception at least to Heribert Roswedye (1569-1629), and treating the lives of all saints under the day consecrated to their worship, had by 1786 proceeded from January 1 to October 11. Their great founder was John van Bolland (1596-1665), and the patient monks who worked with him and after him in what still remains one of the greatest monuments of scholarly cooperation are known as the Bollandists. The level of the different lives varies greatly, but the *Acta* as a whole contain an enormous amount of material, not merely for church history, but also for political, constitutional and social history of a period which, in the eighteenth century particularly, was very little known. It was one of the collaborators in this work, Daniel von Papebroeck (1628-1714), who began the study of diplomatics later worked out by Mabillon.

To Jean Mabillon (1632-1707), of the Benedictine Abbey of St. Germain des Prés, and to the Maurists who followed him, belongs the credit of working out a whole critical apparatus for the study of historical documents. Mabillon's *De re diplomatica* (1681) sets out criteria for judging the authenticity of original source material, outlines the beginnings of a science of palaeography and even of such very special subjects as sigillography. The Benedictines continued during the entire eighteenth century their careful reconstruction of mediaeval history and the working out of historical method, and in 1765 the monks of the congregation of St. Maur issued their *Art de vérifier les dates*, where scientific methods are first introduced into the confusion of historical chronology. The century often supposed contemptuous of history and fond of glib generalizations and easy synthesis is also the century of painstaking research and of critical establishment of canons for sifting evidence.

This critical spirit appears in other fields of history, notably in those of Greece and Rome. The study of classical antiquity, revived by the great scholars of the Renaissance, suffered from the undue reverence which the humanists had for their subject. In the eighteenth century with such men as Barthélemy and Winckelmann archaeology emerges as a distinct discipline. Vico had begun the search for the social origins of Roman law and had anticipated Wolf on Homer. At the very end of the century Niebuhr inaugurated the modern study of early Rome,

destroying a mass of uncritical ideas springing largely from Livy and kept alive by the current system of education. A book like the Huguenot refugee Thoyras' *Histoire de l'Angleterre* (1724), once extremely popular in England, is representative of much eighteenth century work. It is full of prejudice in favor of the Protestant cause; it is moreover ill-digested, quite lacking in the flow and form of the rationalists. But it is full of material gathered from original sources, and it constantly attempts to show how what are now regarded as national characteristics have a historical origin.

Another contribution of the eighteenth century to historiography is to be found in its interest in social history. It is not, of course, that such history was particularly new. As far as his subject matter goes, Herodotus was a social historian. But what characterizes modern interest in social history is a more or less definite belief that the conditions under which ordinary men live can be scientifically analyzed and therefore modified for the better. This interest is a part of the democratic movement which marks the rise of the middle class. Once that class was established, it began to seek in history some compensation for the dullness of its ordinary life, and the romantic schools of historians arose. But in the eighteenth century history remains sober, whether it deals with kings or peoples. Voltaire's *Essai sur les mœurs* is of course social history, and so is much of Montesquieu. Charles Duclos' *Mémoires pour servir à l'histoire des mœurs du XVIII^{me} siècle* (1751) is an example of much contemporary writing on the borderland between sociology and history. But social history flourished best of all in Germany, with such men as Möser and M. J. Schmidt. A passage from Schmidt's *Geschichte der Deutschen* (1778) has a familiar sound: "Most historians are content to chronicle the changing rule of princes and aristocracies, without bothering about the condition of the people But if at the same time the historian does not consider the degree of national happiness he does not seem to me of much use" (preface).

V. It would be impossible, of course, to include in this essay all the important writers in the social sciences in the latter half of the eighteenth century. No doubt discoveries can still be made, and many monographs are still to be written in this field. For the convenience of the student and the general reader who may wish to

go into the subject for himself, the following list of names is appended. The list is not, of course, exhaustive but, taken with the names already considered, includes what is important in the four chief modern tongues and Latin.

POLITICAL WRITERS:

D'Argenson, Babeuf, Blackstone, Brissot de Warville, John Brown, Burlamaqui, Condorcet, Camille Desmoulins, John Dickinson, Diderot, Cl. Dupin, Adam Ferguson, Sir Philip Francis, Franklin, Frederick II, Abbé Grégoire, Helvétius, Jurieu, Linguet, Mably, Sir James Mackintosh, Madison, Mercier de la Rivière, Mirabeau, Morellet, Otis, Paine, Paley, Price, Priestley, Abbé de Saint-Pierre, Bernardin de Saint-Pierre, Shaftesbury, Siéyès, Thomasius, Vattel, Volney, James Wilson, Mary Wollstonecraft.

ECONOMISTS:

Mostly mercantilists or physiocrats, but the Abbé Galiani and Verri, in addition to those mentioned in the text, are worth looking into.

HISTORIANS (excluding the "rationalists"):

Algarotti, Anquetil du Perron, Thomas Birch, Carli, Gatterer, Grosley, Sir William Jones, William Maitland, Joh. Müller, Muratori, de Pauw, Roscoe, Schlözer, Sismondi, Spittler, Soultavie, Tiraboschi.

No attempt at summarizing in a critical fashion the social-scientific thought of the second half of the eighteenth century can do justice to the subject. Certainly we cannot accept the evaluation of eighteenth century thought by such nineteenth century critics as Taine, although theirs is still the current view. The thinkers of the age of revolutions were, according to this view, imprisoned in an artificial universe constructed out of Descartes and Newton. From Descartes they learned to distrust all knowledge not capable of mathematical formulation. From Newton they learned to seek even in human relations for laws of mechanical causation. Their thought is therefore abstract and inhuman; their conclusions apply only to an artificial man of their own creation, a man as unlike existing human beings as a geometrical figure. Their program of reforms, built to suit this artificial man, cannot apply to human beings. To dangle it before real, imperfect men is highly dangerous, as the French Revolution proved.

Now there is no use denying the element of truth in this criticism of eighteenth century

methods in the social sciences. But in its extreme form this criticism is as far from facts as it believes the eighteenth century to have been. In the first place, it is obviously truer of minor thinkers like Holbach than of great ones like Montesquieu. Again, it fails to take into account the complexity of the intellectual interests of the time, to include Burke, Vico, the German patriots, Adam Smith, the Rousseau who inspired the romantic movement. Even the cruder thinkers, who fell most easily into generalizations about the natural man, were partly led into a false method by a desire to get things done, to arrive at conclusions that would influence their fellow men to action. It is notable that, although much early eighteenth century work is in Latin, almost all work done in the second half of the century is in one of the modern languages. Up to a point, as any study of the Jacobins will show, a certain amount of abstraction is extremely practical as political propaganda. Finally these men were pioneers of a sort, and subject to the rashness and overconfidence common to intellectual pioneers. They were trying to put on paper the lofty aspirations of the growing middle class.

Such explanations—one might almost say, such apologies—are necessary for the normal level of thought which is determined by the "spirit of the age." But it is almost a commonplace that the great men of an age, though they embody its spirit, also transcend it. For such men as Montesquieu, Adam Smith, Rousseau and Bentham no crude formulae about *a priori* thinking can hold. Indeed the whole problem of the use of the deductive method by eighteenth century thinkers is one that deserves a more truly critical treatment than it has commonly received. Certainly the men of the time thought they were appealing to experience. Most of them were willing enough to appeal even to historical experience. The facts which they used to build up their theories may seem to us now insufficient in number and even inadequately established as facts, but as facts they did command the respect of the thinkers who used them. French republicans sought to model themselves on Roman republicans; even the utopian socialist, Morelly,

tried to find socialism in fact in ancient Sparta.

But is not this mere appealing to an arbitrary set of facts to confirm an arbitrary theory, or rather is it not molding fact to desire? No doubt many eighteenth century thinkers saw only the facts they wanted to see. But are desires and hypotheses utter aliens to each other in the consciousness even of the modern scientist? The eighteenth century did at least avoid the error that facts can take care of themselves, that induction is a process that goes on in the mind of the thinker, indeed, but without any active co-operation on his part. What the modern scientist means by a theory or a hypothesis is what the eighteenth century thinker meant by a law of nature. For both, the chaotic, accidental world as it appears to the senses—and even to common sense—can be made to appear orderly to an inquiring and persistent mind. The social sciences today, as well as the physical sciences, are more aware of the complexity of the sense world, more aware therefore of the necessity for careful research; they are more tentative and less dogmatic than in the eighteenth century. There adheres to the eighteenth century idea of natural law something more of ethics and theology than is fashionable nowadays, at least under those names. But the concept of a "natural order" not apparent to the unthinking man is common to both centuries.

What, then, is left of the social sciences in the latter part of the eighteenth century? A great deal of propaganda, of popular writing that first helped arouse a class consciousness in the middle classes, and made great numbers aware of the existence of social problems; a tradition, therefore, of the intimate connection between the social sciences and practical politics; the work of certain great founders, like the economist Adam Smith and the sociologist Montesquieu; a great deal of patient research, an accumulation of facts that can still be used to support theories other than those held by the workers who first uncovered the facts; and, finally, the concept of a natural order for which all science is a search.

CRANE BRINTON

IX

Individualism and Capitalism

I. What were the inescapable facts and ideas which surrounded and impinged upon the senses of the thinkers who formulated social theories in the early decades of the nineteenth century? Before settling down to an examination of that problem we should consider briefly a closely related philosophic question which has accompanied speculation since the days of the Greeks, namely, which is older, the fact or the idea? "In the beginning was the Deed" (*Am Anfang war die That*), we are informed by the poet Goethe. "In the beginning was the Word," we are told by the theologian. The great debate has never been closed to the satisfaction of the contestants, but William James has given us a fair working formula in the declaration that the worlds of fact and idea have evolved together. Their relations are reciprocal and no sword of reason has yet been forged with an edge fine enough to separate them. Whoever would seek to penetrate to the heart of an age or indeed to divide indivisible time into ages must reckon with this instrument of thought.

Undoubtedly new facts are easier to discover than new ideas, assuming for the moment that the two are separable for the purposes of thinking about them. The first use of the steam engine to turn wheels, the first loom driven by power, the first successful crossing of the Atlantic by a ship driven by steam were new facts in the history of the world. But the cluster of ideas associated with each of these facts wears ancient aspects. Indeed the idea that such things could be done was as old as Roger Bacon at least, to make no reference to the use of steam by the Greeks. Yet for the great mass of humanity the appearance of each of the material phenomena mentioned above was a new fact, stirring up old ideas and suggesting new ideas.

There are times in the history of the world when facts almost stand still, when ways of living, working, traveling and fighting change so slowly that thought more than catches up with them—seems in reality to control, rather than to reflect, them.¹ Broadly speaking, such a

period was the Middle Ages. Then again there are periods when new facts come pell-mell upon the world, devastating wars and revolutions, epoch-making inventions, defying old systems of thought, making them appear incongruous with the world of reality and compelling a revision of logical patterns once satisfactory to their possessors. Sometimes these new facts come so swiftly and spread so widely that thought is apparently incapable of reducing them to a system, to say nothing of controlling them in relation to ideas, inherited or novel.

Nevertheless even in such periods of history the relations of idea and fact are still reciprocal. If, for example, modern emphasis on the production of goods seems to flow from the fact of machinery and tends to a secularization of thought, it must be said that the secularization of thought which accompanied the renaissance of pagan learning stimulated interest in this world as distinguished from the next, lending sanction to the enjoyment of goods and thus promoting their manufacture. Long before the Protestant revolt and the rise of Calvinism, to which too large a part of the commercial spirit is now uncritically attributed, secularism was growing in Catholic learning and doubtless would have increased had the quarrels of princes and popes never taken place—assuming for the moment that, given the contemporary movement of ideas and facts, such quarrels could have been avoided by some process.

However closely a new fact of high significance may be related to a pre-existing cluster of ideas, it nevertheless runs like a sword into the old web of ideas. At first it must be considered in terms of those ideas, their logical form and phraseology. It may excite wonder and surprise, produce ejaculations of amazement and incredulity, but when its implications are considered, the nature and purpose of control over it (if any) must be geared up to the inherited stock of opinions, morals, creeds, laws and sayings. Gradually the new fact is worked into

¹ See George O'Brien, *An Essay on Mediaeval Economic Teaching* (London 1920) p. 189 et seq., for changes in scholastic theories of interest and usury accompanying increas-

ing opportunity to accumulate and lend money. Also Edmund Schreiber, *Die volkswirtschaftlichen Anschauungen der Scholastik seit Thomas v. Aquin* (Jena 1913) p. 227 et seq.

the old body of thought, effecting changes in it, making some of it obsolete, giving novel direction to the remainder, and suggesting idea patterns which at least have the appearance of novelty. This operation of readjusting facts and ideas requires time; hence there is always a lag between the appearance of an important fact and the formulation of systematic thought about it. And inevitably such systematic thought, being the product of thinkers, bears some kind of relation to the connection of the thinkers with the fact, a connection that may be close, remote, friendly or hostile. Perhaps it is principally for this reason that the political philosophies of countries seem to vary so materially in rhetorical form. For example, when the English middle classes overthrew absolutism in the seventeenth century, the dominant body of inherited thought was religious—hence the Puritan revolution was defended in Biblical imagery; but when the French carried out the same kind of revolution more than a hundred years later, natural science had made such strides that “natural” rights appeared to be more real than the admonitions of the God of the Old Testament.

II. Now the central fact that gave decided character to the decades between the French Revolution and the middle of the nineteenth century was the rapid, almost bewildering, rise of capitalism to a position of dominance in western civilization. The term calls for definition. What is capitalism? Laying aside all collateral issues and going to the heart of the matter, it is a system of production, involving social relationships, in which the primary object is the gain of profit through exchange.¹ Among the primary social relationships created by it is the association of employers and employees in the process, the former as dominant directors and the latter as the source of labor skill and strength. Capitalism is not synonymous with machine industry, although it has flourished most luxuriantly in the age of technology. It is not synonymous with manufacturing; indeed conceivably it might take over the entire scheme of agricultural economy. It is not synonymous with objective capital goods or accumulations of instruments of production, for in that sense feudalism was capitalistic in that it had instrumentalities devoted to production.

Yet wherever this system of production has overtaken the static order of feudalism and

guilds—production primarily for use and exchange at “a just price”—it is accompanied by certain outward signs, material and human: (1) mines, factories, machines, railways, stores, warehouses and other implements of production and banking and systems of credit on a large scale; and (2) owners of the means of production, directors, technologists and laborers ranging from skilled craftsmen to casual workers. The seats of capitalism are in the cities, not the open country. In the main it is employed in the creation and distribution of manufactures. Unlike agriculture and handicraft industry, producing for use or local exchange at a just price, capitalism has apparently indefinite boundaries for expansion. The amount of land available for cultivation is fairly limited (though science works wonders here also), but the area of capitalistic operations has no limits visible to the naked eye. The amount of wealth that can be amassed by it, the number of men and women who can be employed by it, seem capable of indefinite expansion. That is not all. The agriculture of a country is carried on within its geographical boundaries and under its flag, while the capitalism of a nation may carry on operations under many flags in all parts of the world. Conceivably the capital of any particular nation invested abroad might exceed in value the capital invested at home.

In its economic methods and also in its technological aspects, capitalism is essentially rational, involving no mystic elements for guidance in practise or in the increase of goods. The uncertain elements of nature which plagued the agriculturist of the ancient type—rain, drought, insects and declining fertility, to be influenced by exorcism of spirits—do not appear in the capitalist's world. As to the technical aspects of capitalism, there can be no doubts; it is governed by the laws of mechanics and physics which can be expressed in terms of mathematics: mass, weight, extension, number, movement, etc. If capitalism is restricted to its proper economic meaning as a social relation, still its essence is rational. Every operation is based on calculable factors which can be mirrored in balance sheets; extension of plant, raw materials, “hands,” output, prices, sales and profits. Capitalists may pray for riches, but they know that the invocation of saints will not automatically, by some unseen process, make them rich. They may need “psychology” to improve “industrial relations,” but such improvements are reflected in ledgers and registers.

¹ P. Rostock, *Der Ausgang des Kapitalismus*, p. 1-8.

III. The age which witnessed the rise of this system of production to a position of dominance in western civilization is the period of early capitalism. In this connection "early" is a purely relative term, in a strict sense scarcely correct. In essence early capitalism is no different from late capitalism, for the system of production does not vary in itself, but it takes time for capitalism to spread over a wide area of a nation's economy and at last reach a position of dominance. That is self-evident; hence the justification for the application of the term "early capitalism" to the period of history here covered.

But how can we discover just when capitalism has reached a position of dominance? This question is not so easy to answer. One measure, of course, and an important measure, is the value of the instruments used in capitalistic production as contrasted with agriculture. Another measure is the proportion of workers employed in capitalistic enterprises, as contrasted with handicraft and agricultural undertakings. Still another measure is the influence exercised by the possessors of the bulk of the capital goods in the processes of government, domestic and foreign, an influence difficult to assess, but none the less real. Historians could throw some light on it if they would. Systems of suffrage and representative government afford outward signs; secret documents sometimes unearthed help to reveal the true inwardness of politics.

Judged by such standards early capitalism passed over into high capitalism at different periods in the different nations of western civilization. Approximate dates may be fixed for convenience. For England the year 1846 may be chosen: English capitalism, triumphant in the world market, had no need for a protective tariff, especially on grain consumed by its employees; in that year it smashed the agriculturists in Parliament and forced the adoption of the free trade principle—extended later. In the United States the value of the instrumentalities employed in the capitalistic process overtopped the value of the land about 1850; and in 1865 the armies of the southern planters laid their swords at the feet of northern victors. The Revolution of 1848 in France, which revealed the power of organized labor, likewise revealed the power of capitalism; and the latter triumphed in the struggle, announcing the new day. It will not be forgotten that the Orleanist monarchy established in 1830 was avowedly a

bourgeois monarchy. In Germany capitalism did not get into full swing until after 1870 and its triumph was not politically realized until after the collapse of 1918. In southern and eastern Europe generally, the capitalist process had not advanced beyond its early stage at the opening of the twentieth century—delayed by many factors, including the competition of the countries already far on the way.

IV. An inquiry into the nature of this social giant, equipped with steel and steam, must be prefaced by some reference to its origins, especially as there is a tendency to make it identical with the spectacular appearance of inventions in the eighteenth century and to connect it intellectually with the Protestant revolt, more narrowly with Calvinism. Indeed the late Sir William Ashley said that Calvin's letter lending theological sanction to interest (and usury in practise), written in 1545, marks a turning point in the history of European thought. Other writers with less critical discrimination seem inclined to make this the beginning of a capitalist philosophy, inspiring a great upswing in capitalism. Max Weber finds the true "spirit of capitalism" in Benjamin Franklin's *Advice to a Young Tradesman*—a document appropriate to Calvinistic Boston.¹ Indeed, if some thinkers of this persuasion are to be believed, the idea preceded the fact: capitalism sprang from the soil of Calvinism: thrift, promptness, industry, honesty the best policy, economic expediency, coupled with interest and profit. Thus the prejudices and passions of religion are associated with the process of attempting to understand the greatest phenomenon of the modern age.

At the other end of the scale are the economists who find the origins of capitalism in sources less mysterious than Calvinism, in primitive accumulations, the gold of the New World, and oceanic commerce opened in the age of discovery. All explanations in this direction are little more than variations on the statement made by Marx in the closing chapters of the first volume of *Capital*. With sweeping dogmatism he crowds everything into a few lines: "The discovery of gold and silver in America, the extirpation, enslavement and entombment

¹ Max Weber, *Gesammelte Aufsätze zur Religionssoziologie*, 3 vols. (Tübingen 1922-23) vol. i, p. 30 et seq; Henri Hauser, *Les débuts du capitalisme*, p. 45 et seq. Protestants from capitalist countries, proud of the achievement, accept the allegation as an honor; while Catholic writers, whose religion flourishes best under pre-capitalistic conditions, accept the allegation as a discredit to Protestantism. Science is not concerned with the merits of this controversy.

in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins signalized the rosy dawn of the era of capitalist production. Those idyllic proceedings are the chief momenta of primitive accumulation. On their heels treads the commercial war of the European nations, with the globe for a theatre . . . Capital comes dripping from head to foot, from every pore, with blood and dirt." Like the Calvinistic explanation, this has the merit of simplicity. When modified or extended in the hands of such writers as Sombart, it still seeks the origins of capitalism in external facts rather than ideas—leaves out of account certain subjective factors without the presence of which no system of bare robbery could permanently flourish.

The truth is that neither simple explanation of capitalism is tenable. Great emphasis can be given to Calvin's teachings on interest only by scholars who are unfamiliar with the doctrines of the scholastics—especially the later writers of that school who sought to apply the principles of Thomas Aquinas to changing circumstances, with a high degree of theoretical and practical success. There was in fact nothing in the dogmas of the mediaeval theologians which would have prevented the rise of capitalism had other conditions of the time been favorable. They did, it is true, forbid usury, that is, to use Dr. O'Brien's definition, "the payment of a price for the use of a sum lent in addition to the repayment of the sum itself." In other words, there was to be no charge for the "use" of money lent. But if the lender suffered any damage by making the loan—found himself in a worse position—then he was entitled to compensation in the form of interest. If the money was not paid back on the day it was due, it was lawful to exact a payment for the delay; and in practise loans were often made payable in a day or two with the understanding that there was to be delay and therefore interest damages for breach of contract. If there was a loss of opportunity to make a profit some other way, the lender could collect interest. If there was any special risk, the lender could exact something in addition to the principal of the loan. It was not unlawful to pay interest as an expression of gratitude for the favor. As business increased during the thirteenth and fourteenth centuries, the scholastics worked hard at interpreting the earlier doctrines, and long before Calvin was born they had established ingenious sanctions

for making capital accumulations and taking what amounts in fact to interest on loans. Calvin's famous letter on interest is important only to those who ignore the scholastics or neglect the evolution of their ideas.

V. When any capitalistic system is analyzed into component parts, it will be found that a certain intellectual climate, as well as technological conditions, is essential to its facile development. Concentrating on the production of goods for profit, capitalism calls for the predominance of secular interests in intellectual life, emphasis on science, business, government, economy, commerce and other related branches of thought. Using the state to maintain order, advance its enterprises in foreign markets and protect its most distant commerce, it requires a freedom of the state from entangling alliances with classes founded on landed possessions—landlords and clergy—a secular state separated from church and justified by secular performances rather than divine sanctions. Resting, at least in its early stages, upon the enterprise and labor of individuals rather than corporations, capitalism needs for its fruition an emphasis on individualism as distinguished from emphasis on the excellence of a settled order of classes such as held the center of the economic field in the Middle Ages. Making use of exact methods, especially as its technical equipment increases, it can live only in an atmosphere of mathematics and calculations, which happen to be at the same time indispensable instruments of the applied science that is so serviceable to capitalism. Buying and selling without respect to person and rank, employing talent wherever it can find that capacity, it thrives on democracy and equalitarian doctrines—the wider spread the better for trade. Finally a wide distribution of knowledge is also necessary for the extensive functioning of capitalism; the directing personnel must read and write; Charlemagne might be illiterate but the humblest factory manager cannot enjoy that luxury; working people must at least be able to read the rules and instructions; and the buying populace must be able to read advertisements if its wants are to be stimulated.

If such intellectual conditions are necessary to capitalist development, it follows that movements in ideas, either as the result of abstract speculation and dialectic processes or as the reflection of novel changes in material circumstances, must be taken into account in explaining the rise and development of capitalism. Now

among the intellectual movements that helped to usher in the capitalist age, the humanism of the Renaissance was the central feature. Although it was connected with the development of mediaeval commerce, it was not a product of that commerce; it was the recovery of a rich pagan learning. Above all it was secular, related to this world, justifying its ways and pleasures. And it must be remembered that humanism was a Catholic, not a Calvinist or even Protestant product: Protestantism hindered rather than promoted its development. Catholics were mistaken, perhaps, when they thought that they could play with Greek fire and yet preserve intact the closed system of Christian theology, but they took the risk nevertheless. Another aspect of Catholic thinking which contributed to the secular interests and individualism of capitalism was the nominalistic philosophy of the schoolmen. This philosophy regarded the world as a concurrence of persons and things and worked as a disintegrating force on the creed of realism with its theory respecting a framework of underlying reality appropriate to a rigid society. Ground between humanism and nominalism, the intellectual heritage of the Middle Ages was in process of disintegration before Calvinism came on the scene.

No doubt Protestantism accelerated this process in many ways. It intensified the old conflict between church and state, aided in the establishment of the supremacy of the state in Protestant countries, and lent countenance to sequestrations of clerical property which helped to decimate the clerical wing of the landlord class. It is true that for a time Protestant states maintained a public religion, but the multiplication of sects made the practise an object of attack and emphasized more and more the secular character of government. Yet we should be on our guard against attributing too much to Protestantism *per se*; for even in Catholic countries conflicts of one kind or another led to the dissolution of the Jesuit order, to sequestrations of clerical property, and finally to the separation of church and state. How far those operations were due to ideas that filtered in from Protestant nations or to the rise of the bourgeois among Catholics is a matter of speculation which historical research has not yet determined. Indeed the extent to which Protestantism was an economic movement is still the subject of animated debate among scholars. Yet when all pertinent facts are assembled and weighed, it will certainly be conceded that Protestantism

facilitated the secularization of the state, relaxed considerably the clerical control so useful to the landed classes, and gave the state a freer rein in creating conditions favorable to capitalism.

By the middle of the nineteenth century the supremacy of the state was firmly assured in all countries of western Europe; such remnants of state-church union as remained had clearly become anomalies to be eliminated in the course of the next few decades. The state was emancipated from scholastic economics, theories of the fixed social order and other doctrines appropriate to a society founded on status as distinguished from contract. The ground was thoroughly cleared for economic action by the state and for an economic philosophy of capitalism that viewed the state as a policeman keeping order for the owners of property.

In other relations Protestantism prepared the way for capitalistic economy. Under its influence the clergy, supported by landed foundations administered by clerical agents, practically disappeared; for the economically independent clergy it substituted a clergy dependent in the main upon voluntary contributions from the members of the congregation. In short the pulpit was subjected to the pew and inevitably took on more or less the thought coloration of the parishioners. At the same time the dictatorship of theology declined and the secular pre-occupations of church goers deflected the stream of theological tendency. By the reduction in the number of holidays and festivals Protestantism released more time for productive labor, and by emphasis on salvation by faith rather than works it released more of life for the business of money making and wage working. Laying stress on the direct and immediate relation of the individual to God, it contributed to the individualism in thought and practise which served capitalism in obtaining its necessary supplies of entrepreneurs and wage workers. In praising the virtues of thrift, sobriety, promptness and industry, Protestantism facilitated the growth of a system of economy founded on monetary accumulations and regularity in productive processes. Grass may grow and sheep may graze if the peasant lies drunk under the hedge occasionally, but the wheels of mills cannot turn steadily if boiler stokers must have frequent debauches. A state of affairs calling only for amused comment in one set of circumstances becomes intolerable in another. The Puritanism of Protestantism served the promotion of capitalist enterprise.

Incidentally and apparently without calculation, Protestantism aided the cause of education, so essential to economy founded on exact knowledge. With a view to keeping their children loyal to their particular set of dogmas, the members of each sect early adopted the practise of teaching their offspring the rudiments of learning so that they could read at least the catechism and the creed. Faced by the disintegrating rivalry of Protestantism, the Catholic church adopted a similar practise. But having opened the gateway of learning, they could not set bounds to the outcome. The growing secular preoccupations of the age pressed through the portals of educational institutions. The high cost of sustaining religious schools led to the practise of asking for state assistance for education, and the rivalry of sects, which was increased by this action, contributed steadily to the secularization of educational control and the educational process itself. Where churches insisted on maintaining religious schools they were nevertheless compelled to adopt secular curricula to prepare their children for earning a livelihood in competition with children prepared by the public schools. By the middle of the nineteenth century even the religious schools were supplying boys and girls well enough equipped with secular learning to take part in industrial processes. At the same time the development of printing machinery and the application of power to presses made possible the publication of cheap books and newspapers, feeding secular and practical interest outside of the schoolrooms. Learning and the distribution of knowledge had passed beyond the control of clerical authorities.

Forwarding the same secular and individualistic tendency, the doctrines of natural right and equality, associated with the name of Rousseau, operated powerfully in the capitalistic direction. Defying divine right, advocates of natural right laid emphasis on man as an enjoying, producing and consuming animal, thus lending sanction and rationality to the creation and use of goods. At the same time the individualism affiliated with equality worked against old associations and fixed structures such as guilds and feudal ranks and in favor of freedom of opportunity for entrepreneur and laborer. It was in the name of Rousseau that the vestiges of feudalism were destroyed in France during the revolution, that guilds were abolished, and the way cleared for the bourgeois order of things. If that same equalitarianism made trouble for the bourgeois

later, its service as a stimulus to economic activity cannot be denied. As for natural right, it clothed in a realistic garb the undertakings of capitalistic enterprise which was nothing if not natural—employing the materials and powers of nature in the creation and distribution of goods with a view to earthly rewards.

The development of natural science, which ran parallel with the evolution of natural rights, besides contributing to the technical side of capitalism, also made profound alterations in the intellectual climate, adding features more favorable to that process. Lord Bacon, the father of the movement—to make an arbitrary break in an endless stream of thought—set an example to the coming generations by resorting to experimentation with natural phenomena and glorifying the application of this method to the creation of objects of utility. Bacon's work was advanced by Descartes who helped to break the dominion of authority over reason and made substantial additions to mathematics and physics. Turning from the earth, Newton applied the same mental processes to the starry heavens, discovering one law underlying the structure of the universe. In every department of science the idea of natural law was utilized with fruitful results. Carried into France, the underlying concepts of naturalism were made the basis of an immense intellectual effort, culminating in the *Encyclopédie*, and were employed in the intellectual manipulations that accompanied the triumph of the bourgeois in the revolution. Temporarily checked by reaction, this concept of a material universe subject to natural law flowered again during the opening decades of the nineteenth century, adding philosophic sanction to the production of goods while fertilizing the application of science to the same ends. Hence it may be said that mathematics, the rationalism rooted in its logical processes, analysis of the materials of the world through the aid of chemistry and physics, and belief in the universality of natural law, enriched the climate for the flowering of capitalism—itsself the quintessence of rationality.

VI. While mathematicians, natural philosophers and physicists were at work developing the technology and intellectual climate favorable to capitalism, political events marched in the same direction. The Napoleonic wars dealt death blows to feudalism in Spain, Italy and Germany; Napoleonic decrees abolishing feudalism, sequestering clerical property, suppressing convents and wiping out internal cus-

toms lines over wide areas of Europe, could not be permanently undone by the most vigorous reaction. In Germany Napoleon not only leveled hundreds of feudal principalities to earth and secularized clerical property; he prepared the way, through partial consolidation, for the unification of Germany, a condition prerequisite to the flowering of capitalism beyond the Rhine. Equally important in the same direction were the collateral consequences of his wars and policies. It was in girding herself for the war of liberation against Napoleon that Prussia, under the leadership of Stein and Hardenberg, abolished serfdom, created a popular army and called into life the ardent nationalism which later supported the Zollverein. Napoleon himself was a titanic rationalizer; his contributions to finance and banking, to the codification and simplification of the laws, to administration by technically competent officials, to military organization and supply, to the development of industries on the continent, to the construction of roads and public works, all marked him out as the child of his time—no divine Alexander or Caesar, as he himself once humorously remarked, but the genius of the age of reason, the forerunner of triumphant capitalism.

If the defeat of Napoleon was marked by a temporary and partial clerical and feudal reaction on the continent, it immensely facilitated the advance of capitalism in England. Through the additions of territory won by arms and confirmed at the settlement of 1815, Great Britain widened her trading empire and extended the markets for her manufactures. Enriched by the profits of twenty-two years of fighting, English capitalists now completely overtowered in wealth and effective power the landed aristocracy already heavily diluted by the infiltrations that had been going on since the seventeenth century. In the Reform Bill of 1832, extending the suffrage to these and other bourgeois, was registered the political outcome of irreducible economic fact. With the decline of the landed aristocracy went a decline in the clerical estate attached to its fortunes. If the universities still controlled by the Church of England clung to the classics and to religion, English thinking outside of the universities swung heavily over to utilitarianism, economy and naturalism; consider Bentham, the two Mills, Ricardo, Lyell, Darwin and Spencer. If the masses remained attached to the church or to the evangelical sects, the prophets of the

new industrial order went in for rationality and skepticism. With her peasantry expropriated from the soil and her landed aristocracy subjected to mill owners and merchants, England passed into the stage of triumphant capitalism before the middle of the century, and thus led the world in that form of economy and in the development of the intellectual patterns and colorations appropriate to it.

On the continent, where temporary reaction restored the appearances of clericalism and feudalism, the forces of economic evolution made headway in spite of all attempts to erect the old barriers anew. Fifteen years after the Bourbons were restored they were finally expelled in the Revolution of 1830, which frankly established a bourgeois monarchy, supported by bankers and rentiers. When the banking aristocracy which sustained Louis Philippe refused to make concessions to the mercantile and manufacturing elements, it was overthrown in the February Revolution of 1848. By its very stubbornness it rendered impossible a smooth transition to simple bourgeois order and brought about a crash which awakened a new estate, the working classes, to political activity, threatening capitalism by a premature communism. Nevertheless, with the aid of the third Napoleon, the communistic danger was averted, the empire was restored, and conditions favorable to business enterprise were established. "Sooner or later war will have to be declared on the Americans," remarked Empress Eugenie to Napoleon III one day in 1853. "War, my love," replied the emperor, making a false prophecy, "is no longer possible in France; we are, so to speak, hemmed in by material interests and trade, which are all in all." To such a point had come the nephew of the great Napoleon who sneered at the English as a race of shopkeepers. The romantic age of the Bourbons had passed forever. France was on the way to the third republic.

In Germany and Italy the consolidation process so swiftly advanced by Napoleon I was completed shortly after the turn of the mid-century. It was in 1834 that the unifying Zollverein was inaugurated; thirty-three years later, in 1867, the North German Confederation was launched, to be completed by the addition of the south German states four years afterward. The theater was being prepared and energies released for a remarkable upswing of capitalism in Germany. It was in 1861 that Victor Emmanuel was crowned king of united Italy and in 1871 that his capital was moved to Rome. In

the meantime the Austro-Hungarian complex of states and peoples was being reorganized on a compromise basis and a vast territory prepared for unhampered trading relations. How far this state-building movement was the result of railways, improved roads and rising industries cannot be determined by economists, but there is no doubt that by enlarging the trading area, eliminating tariff barriers, facilitating the construction of railways for strategic reasons, political unification created economic and legal conditions favorable to the expansion of capitalism as against feudalism.

During these years of consolidation in central and southern Europe, domestic legislation, as well as wars and constitution making, aided the capitalistic process by eliminating various restraints of feudal tenures on the free movement of labor. As already indicated, in 1807, Prussia abolished serfdom by a decree designed to "remove every obstacle that has hitherto prevented the individual from attaining such a degree of prosperity as he is capable of reaching,"—a formula which would have suited Franklin and Calvin. By a law put into effect on July 1, 1848, serfdom was extinguished in Austria, and by an act of September 7, 1848, there was a sweeping abolition of feudal vestiges in that realm, in language which recalled the famous French decree of August 4, 1789. During the same revolutionary year, 1848, the serfs of Hungary and Croatia, under various laws and decrees, obtained "personal liberty." In 1861 Alexander II emancipated the serfs of the Russian Empire, thus carrying the liberation movement to the gates of the Orient. Although the abolition of serfdom destroyed the legal foundations of servitude it did not of course produce the same results everywhere; neither did it always give land to the former tenants or free them from charges in the nature of indemnities. But broadly speaking, it worked a revolution in agricultural economy and, what was more significant, legalized more or less the freedom of migration, national and international, so useful in supplying labor for capitalist enterprise.

Beyond the borders of Europe were occurring events hardly less significant for western civilization: the development and settlement of Australia, the opening of China and Japan to western commerce and intercourse, the penetration of Africa, the independence of Latin America and the exploration of distant islands of the seven seas. Across the Atlantic a new political power was rising on the world horizon:

the United States of America. During this period Louisiana and Florida were purchased, Texas was admitted to the Union, and war was waged with Mexico, ending in annexations that carried the borders of the country to the Pacific; in 1867 Alaska was purchased, with distant islands near the outposts of Japan. This period witnessed the triumph of Jeffersonian and Jacksonian democracy and finally, in 1865, the victory of capitalism and freehold agriculture over the slave planting system. American industries and agriculture furnished an outlet for the overflowing populations of England, Ireland and Germany; and wheat from American fields exerted a more powerful influence on European economy than the gold of the Spanish conquistadors. To the United States European political and social philosophers, such as de Tocqueville and Harriet Martineau, came to find illustrations and confirmations of their European predilections. A republic and a democracy, anticipating by generations the fate of Europe, America was both an inspiration and a menace to contending parties in the Old World. Neither the rage of Carlyle nor the meditation of Sir Henry Sumner Maine could leave the United States out of its sweep.

To add to this account of intellectual movements, political events and economic legislation, a description of the great inventions of the period under consideration would be a work of supererogation. Yet it may not be amiss to call attention to the fact that between 1800 and 1865 steam navigation was established and trans-oceanic lines opened to all parts of the world, railways were inaugurated and a network of lines spread over western and central Europe, and telegraphic communications began to be employed among all the great centers of commerce. Meanwhile improvements in textile machinery, the steam engine, iron-working equipment, and indeed the whole outfit of manufacturing, poured in such bewildering rapidity from workshops and laboratories that nothing short of an encyclopaedia can give an adequate impression of their number and importance. For our purposes their significance lies especially in the acceleration of the capitalist process as a productive and an accumulative operation, in the creation of capitalists and working classes, in the disintegration of feudalism as an economic and social relation, in the extension of rationalization over increasing areas of human activity, in setting fixed orders of society afloat—in short, revolutionizing the social and intellectual heri-

tage of the Middle Ages from the bottom to the top. Indeed it would be well to remember that during this period Justus von Liebig (1803-73) made his revolutionary applications of chemistry to agriculture, invading a field long dominated by rule of thumb, signs and omens, and bringing to rural methods and mentality the dissolving alchemy of rationality, supplementing the work of Stein in refashioning mankind's oldest work in the image of scientific capitalism.

VII. A transformation in economic and political arrangements so fundamental as that just outlined could not fail to produce novel patterns of thought and to bring about novel applications of inherited patterns. Naturally the center of intellectual interest was moved ever nearer to the new center of actual interest, capitalism and its system; and the conflict of ideas that raged around this realistic social structure and process spread to the uttermost borders of thinking, even into music and aesthetics. In beginning a survey of this intellectual revolution, it is well to recall that none of the participants were disembodied spirits, not even the cold-blooded scientists who so passionately announced their lack of passion. All of the thinkers in this period, as in all other periods, stood in some relation to the feudal order that was crumbling or the capitalistic order in the process of becoming. By family origin they were of feudal, capitalistic, mercantile or mixed ancestry, and in living and earning a living were involved more or less in the one system of economy or the other. Their education leaned either to the clerical and philosophical, on the one side, or to the practical and scientific, on the other. Some of them were, no doubt, more or less detached from their environment, but the detachment was a matter of degree, not of absolutes. If economics boasted of being a science of actuality, it is appropriate to remember that a large body of critics looked upon it as a defense mechanism for capitalism, and Karl Marx turned its leading doctrines to the ends of a communist revolution! When economists declined to answer questions respecting the evolution and outcome of their subject matter, on the ground that such inquiries were irrelevant, they were admitting limitations rather than improving the status of their science.

New conditions in England were especially favorable to the development of what may be called "pure economics," that is, thought about business untinged by clerical and scholastic

aspirations. In that country the feudal aristocracy was practically submerged under capitalism. Advancing far ahead of France and Germany in technology and large scale production, masters of the world market by virtue of their earlier development of machine industry, English capitalists needed no protective tariffs to save them from foreign capitalistic competition. Hence free trade was decidedly to their interest and in promoting it they were not compelled to make terms with the landed aristocracy; on the contrary, they could force free trade upon the country by their own action. Isolated by the sea and defended by the navy, they needed no standing army with its feudalistic heritage and mentality. Rejecting military aid as a defensive force against foreign countries, they could, with more logical consistency, reject it in domestic affairs. For these reasons, therefore, they had to make no serious compromises with feudalism or cameralism, and could go straight to the promotion of capitalism with fewer handicaps of heritage than their brethren on the continent. Practical interests, material circumstances and intellectual climate favored a concentration on "pure economics" as distinguished from "political" economy and an emphasis on the economic man in contrast to the man affiliated with a class order (*Standesordnung*). Thus temporary and local conjunctures gave to English "economics" a validity akin to that of natural science, at least in the minds of its creators and beneficiaries.

Realistic thinking about this order, that is, thinking undisturbed by metaphysical and clerical inquiries, was distinctly favored by the full-flowered development of English materialism. Hobbes, Locke and Hume had made immense contributions to this scheme of world interpretation, and as the eighteenth century turned into the nineteenth, Jeremy Bentham applied it to social phenomena in his *Introduction to the Principles of Morals and Legislation* (published first in 1789 and in a new and corrected edition in 1823). "Nature," he declared, "has placed mankind under the governance of two sovereign masters, pain and pleasure. . . . They govern us in all we do, in all we say, in all we think: every effort we can make to throw off our subjection will serve to demonstrate and confirm it. . . . The community is a fictitious body, composed of the individual persons who are constituting, as it were, its members. The interest of the community then is, what?—the sum of the interests of the several

members who compose it." Out of this theory of utility flowed Bentham's theory of political economy: "The business of government is to promote the happiness of society by punishing and rewarding." In other words, the function of thinking about society and its component individuals is a matter of calculation and balancing, akin in spirit to the bookkeeping operations of the counting house. To such a point had the materialist conception of life brought the speculative technology which the economists of capitalism were to manipulate during the first half of the nineteenth century.

In the field of theory four men—Ricardo, Senior and the two Mills—and in the sphere of practice two men—Cobden and Bright—developed the colorative system of capitalist philosophy into a logical structure of dogma, all within a framework of property conceptions rescued from the ruins of feudalism. Yet it is not easy to portray that structure, for it was composed, in part, of "iron laws" of rent, profit rate and wages, subjected to ruinous limitations and exceptions, and, in part, of moral aspirations quite foreign to the strict business of natural science. Broadly speaking, however, it consisted of the following parts: Society is composed of individuals, each struggling to avoid pain and to secure pleasure-giving goods. Where legal freedom of contract and of motion is allowed, the individual applies his talents and capital to the enterprise for which he is best fitted. Competition guarantees the survival of those who render economical services at the lowest price. Competition and rent regulate prices, profits and wages, so that each productive factor in society obtains a reward fairly apportioned to its deserts. Pressure of population keeps wages near the subsistence level, and the improvidence of the poor assures an abundant labor supply. Everybody is the best judge of what is beneficial to him, and by trusting to his instincts and reason can find the place in society to which he is best adapted. Attempts to control prices and wages are interferences with natural law, ruinous in consequences and bound to fail. The freedom that works so well within the state works equally well among states; under a regime of free trade each nation produces the goods for which it is equipped by nature—climate, soil and resources—and by talent; and a free exchange of goods among states results in the widest benefit to all, each party to the transaction receiving the most desirable goods at the lowest price. If private monopolies arise and control prices they

violate natural law; if trade unions make the same attempt to control wages they also violate natural law. As for the state, its duties are clear: its business is to protect property and to keep order, allowing the economic machine to function freely under its own momentum—the profit-making passion and the struggle for existence. Obviously this is a scholastic-Newtonian scheme of thought, founded on a fixed-order notion of things—not Hegelian and Darwinian, based on the concept of eternal flux. Indeed it was a fashion in the early years of the nineteenth century to refer to Ricardo as "the Newton of political economy."

Yet as a matter of fact, as Paul Rostock points out, Ricardo's iron law of rent rested on mobile factors—the progressive decline in the productivity of land, pressure of population on subsistence and the ruin of capitalists by the recipients of rent. Although Ricardo himself put off the evil day by reference to technology and improvements in agricultural economy, as Rostock continues, that was a subterfuge, not a square facing of his own logic; and had Ricardo been keener he would have been forced to inquire whether the landlords would go back to feudalism or use their rent to build a new capitalism, or whether labor would smash a system which brought ruin to great masses of mankind. If John Stuart Mill built his political economy on the same Newtonian order of thought he nevertheless privately did not believe in the irrefrangibility of his own system, as his autobiography conclusively shows. But by that time the latticework of "iron laws" was hopelessly shattered by criticism, and within a few years the editor of the *Encyclopaedia Britannica*, confessing that the once solid system of political economy was in ruins, omitted the subject entirely, offering in exchange a historical review of the theme which was notable mainly for its tone of melancholy resignation.

Although the Newtonian economics of the English classicists made some headway on the continent, both economic and political conditions rendered impossible such a complete intellectual victory there as occurred in England. It is true that some French and German thinkers took over the whole creed of Manchesterism; it is true that Napoleon III, first and foremost a theorist, who had lived long in England, coquetted with free trade doctrines; but the most influential of continental economists, such as Adam Müller and Friedrich List, worked in the direction of nationalism; and Napoleon III was

vigorously opposed in the French Parliament in his free trade negotiations. The reason is not far to seek. French industrialists demanded protection against the advanced competitors in England. Exigencies of national defense required the construction of railways and other public works with respect to strategy as well as economy. The struggle for unity in Germany and the popular revolt against Napoleonic power gave a national turn to economics that contradicted at many points the cosmopolitan materialism natural enough in English economics. Moreover the survival of feudal monarchies, such as that of Prussia, with their bureaucracies and cameralistic traditions, kept intact many barriers to the free play of bourgeois economic interests. It was by no means accidental, therefore, that List entitled his great work, published in 1841, *The National System of Political Economy*; neither was it due entirely to his long sojourn in the United States; the realities of life in Germany made the order-of-nature economics of the Ricardian school unworkable, if not unthinkable—certainly inappropriate—for a country that was not an island and was still governed by feudal estates.

VIII. From many angles the system of political economy favorable to the development of capitalism was brought under a fire of criticism and confronted by alternative schemes of thought, occasionally in the guise of natural science. Some of these criticisms flowed from the ideology of the feudalism which capitalism was supplanting—the *Standesideal* of the *Standesordnung*, characteristic of the agrarian, handicraft and mercantile economy of the Middle Ages. The vast literature of Catholic reaction which welled up after the storm of the Napoleonic wars comes almost entirely under this head. Only with difficulty could the Catholic church, which flourished best in agricultural countries and had long been supported mainly by landed endowments, bring itself to accept capitalism as a system of production, and never did it reconcile itself with the natural science, skepticism and utilitarianism of that order. One of the fatal mistakes listed in the *Syllabus of Errors*, issued in 1864, was the error that "the Roman pontiff can and ought to reconcile himself to, and agree with, progress, liberalism and civilization, as lately introduced." Idealizing the feudal relation in which superior persons protected and subordinate persons served, Catholic writers attacked the cold-blooded economy which en-

abled an employer to wash his hands entirely of all responsibility to labor, even in times of industrial crises when thousands were on the verge of starvation.

Nor was this type of thinking confined to Catholic writers. In England it was represented by the vehement Protestant-skeptic Thomas Carlyle. When the sources of his inspiration are explored and the types of his illustrations classified, it will be found that he was the philosopher of idealized feudalism. In praising aristocracy and crying down democracy he was celebrating the heritage of feudalism. In his *Past and Present* he contrasted the feudal ideal with the capitalist order around him. His hero Frederick the Great was a war lord who talked about serving his people. When Carlyle assailed capitalists he assailed them for not assuming toward their laborers the obligations of responsibility which a chivalric lord was supposed to have assumed toward his serfs. If he laid stress on natural inequality, it was not to assure Ricardo's capitalist an abundant labor supply but to emphasize the reciprocal duties of employers and employees which he conceived in mediaeval terms. Liberalism, democracy, laissez-faire, utility and the entire intellectual baggage of capitalism Carlyle looked upon as sheer anarchy, destructive to morals and hence impossible as the philosophy of a going society. "A high class without duties to do," he once exclaimed, "is like a tree planted on a precipice from which all the earth has been crumbling." Although he never pictured his reconstructed capitalism in concrete terms, Carlyle's teachings were certainly hostile to political economy as handed down by Ricardo and exerted a powerful influence on English social speculation during the period under consideration.

Carlyle's companion in arms, John Ruskin, combined the *Standesideal* of his friend with a passion for the aesthetics of the Middle Ages. To him also the materialistic teachings of political economy, its indifference to moral as distinguished from market values, were utterly abhorrent; for the liberalism of Gladstone and the conservatism of Disraeli he had only amused contempt; for the feudal ideal of subordination, reciprocal duties, just price and established quality he maintained to the end an unbroken admiration. To give the title "captain" of industry to a modern capitalist who lived well while his army was either miserable or starving from unemployment was to Ruskin scarcely short of sacrilege. If in his search for a remedy

for evils as he saw them he turned to a kind of state socialism, it was not because he had any sympathy with social democracy of the Marxian type; it was because he believed that capitalists themselves would not establish a system of moral reciprocities and that only the government could be induced to create the new social order. In itself that order, as sketched in the preface to *Unto This Last*, was a kind of feudal socialism in an idealized form. Moreover he emphasized in his scheme a phase somewhat neglected by capitalist economists, namely consumption, especially as a moral act. "Wise consumption," he insisted, "is a far more difficult art than wise production." Political economy, he contended, "consists simply in the production, preservation and distribution, at fittest time and place, of useful or pleasurable things." In other words, it is a science of making the natural order conform to mankind's moral and material needs, not a science of a natural order commanding mankind's obedient adaptation. Of Ruskin's great influence there can be no doubt; and in many ways he was more of a prophet—hence more scientific—than Ricardo or Richard Cobden.

With appropriateness and acumen capitalism was attacked in France by the scion of an ancient noble family, Comte de Saint-Simon, who had served in the American Revolutionary War and was proud of calling himself a soldier of George Washington. Although he made a fortune speculating during the French Revolution, Saint-Simon was never affiliated in work or thought with the capitalist process. In spite of his devotion to the idea of progress he clung to feudal concepts of economy and Christian concepts of social ethics; when he issued his comprehensive attack on capitalism and his program of socialism, he entitled it *The New Christianity* (1825). It was from the work of Saint-Simon that his pupil and disciple Comte derived the inspiration and general drift of thought which evolved into the positive philosophy and the grand sociological concepts associated with it.

In the same general class came the Swiss historian and economist Sismondi, who frankly confessed that it was not science but the observation of the distress caused by panics and pauperism—the disharmony of the capitalist system—which led him to attack it and to propose instead a cooperative order of society. Accused of being a conservative romanticist, looking back to the established order of old times, he freely accepted the characterization and made the most

of it. Of noble origin and classical training, he had little sympathy, practical or intellectual, with the materialistic economists, such as Adam Smith and Ricardo. Without attacking machine industry, he proposed to transform it in the image of the inherited moral order. It was as a prophet of this direction that he became an influential contributor to the development of utopian socialism.

Indeed it might be said with justification that the whole philosophy of utopian socialism, to be generalized from the works of Owen, Saint-Simon, Fourier and Sismondi, corresponded with strange exactness to the fixed order of the just price and established quality idealized by the mediaeval economists. None of the utopians accepted the idea of mankind as the helpless victim of economic laws; all of them insisted, on the contrary, on the possibility of creating an ideal moral order out of the materials at hand. If Owen clung to a curious kind of deterministic materialism, he entitled his utopia "the new moral world." If the utopians made use of natural science in their speculations, none of them ever surrendered to the Newtonian concept of an iron-law nature. All of their utopias were small colonies combining agriculture and handicrafts, assuring a minimum subsistence to the participants, production for use rather than for profit, and quality standards such as the old guilds were supposed to maintain. It would be almost safe to contend that the utopian socialism, so vigorously opposed to realistic capitalism, was at bottom a *Standesordnung*, borrowed from the feudal age and adapted to the technology of the early era of capitalism. Perhaps this may help to account for its transitory character and its failure as a practical force in the first half of the nineteenth century. Still it would be a mistake to underestimate its influence on social thought; it was one of the powerful intellectual currents of the age.

Another variant on the contemporary antithesis to capitalism and capitalist economics was Marxian socialism and Marxian economics, which should in truth be separated. Coming after utopian socialism had flowered in many forms and capitalist economy had found its Newton in Ricardo, Marxian economics was a clear fruit of both, nourished no doubt by the revolutionary events of 1848. Although Marx could hardly find words scornful enough to express his opinion of the utopians of every brand, he was familiar with their writings and derived ideas from them, perhaps even the most

utopian idea of all, namely that at the close of the capitalist period would be ushered in the final order of freedom for mankind. His collaborator Engels, who deserves more credit for the labors of the partnership than he has ever received, was not only acquainted with Owen's utopianism, but wrote for Owen's utopian paper, *The New Moral World*. Hence we cannot avoid the conclusion that both Marx and Engels were thoroughly saturated with utopianism—a scheme of thought strangely conforming to principles of scholastic economy. As Otto Rühle says in his *Karl Marx: Leben und Werk* (Dresden 1928; translated by Eden and Cedar Paul, New York 1929), "Paris was, at the time Marx lived there, a great melting pot full of socialistic and revolutionary ideas. There were to be found remnants of Saint-Simonism, ruins of Fourier's phalanx movement developed by Considérant, Christian socialism according to Lamennais, petty-bourgeois socialism in the variations of view represented by Sismondi, Buret, Pecqueur, Leroux, Vidal and others. At the beginning of the forties Etienne Cabet appeared in Paris again, after he had studied in England the utopianism of Sir Thomas More and the practise of Robert Owen" (p. 87 of German text). In the development of their economics, however, Marx and Engels used primarily the writings of Adam Smith, Ricardo, McCulloch and the classical school, and turned "iron laws" and materialism against the very system mirrored in and defended by them.

While making heavy borrowings from classical economics and utopian idealism, Marx and Engels also collected fundamental concepts from history, both written and observed. The idea of the class struggle, which they so extensively exploited, stood out firmly in the writings of Aristotle, Machiavelli, Harrington, Hobbes, Locke and many other social philosophers; and it was well known to thinkers in Europe and the United States, especially to the framers of the American constitution and defenders of it, like Hamilton, Madison and Gouverneur Morris. What they did not discover by study Marx and Engels learned by direct observation. "After the establishment of great industries," wrote Engels in his work on Ludwig Feuerbach, "especially at least after the European peace of 1815, it was no longer a secret to any person in England that the whole political struggle there turned on the quest for power on the part of two classes, the landed aristocracy and the bourgeoisie. In France, with the return of the Bourbons, the

same fact came to consciousness; the historians of the restoration period from Thierry to Guizot, Mignet and Thiers were unanimous in agreeing on it as the key to the understanding of French history since the Middle Ages. And after 1830, in both countries, a third contestant for dominion was recognized, the working class, the proletariat. Relations had so simplified themselves that anyone would have been compelled to close his eyes to escape seeing in these three great classes and the opposition of their interests the driving force of modern history; at all events, in the two most advanced countries." Students of history, Marx and Engels were subdued to a dynamic sense foreign to the Newtonian economics of the bourgeois; observers of contemporary political conflicts, they could not avoid seeing the inevitability of a social struggle even within the framework of a "natural order."

Besides approaching capitalist economy from the historical angle Marx and Engels looked at it through the intellectual structure of German philosophy, especially Hegelianism. As Germany did not shake off feudalism and clericalism with the same thoroughness as "the nation of shopkeepers," so it did not develop until the nineteenth century a school of materialistic thinkers comparable to Hobbes, Locke, Hume and Ricardo. In being more "reactionary," German speculators escaped the facile superficiality of the sensationalist school and combined mediaeval mystification with a profundity of thought not nourished in England. Perhaps, also, the political and armed conflict between France and Germany from 1793 to 1815 contributed not a little to the rejection of the materialism of the Diderot-Holbach direction. At all events German thought during the opening years of the nineteenth century gave a distinctive environment for the consideration of economic, social and historical questions. Marx, brought up on Hegel, could not by any stretch of the imagination see eye to eye with English economists of the natural-order persuasion.

In a passage of striking power Engels expounded the Hegelianism that counted so heavily in the Marxian formulation of political economy: "With Hegel the truth which had to be recognized in philosophy was not a collection of ready dogmatic propositions which, once found, would only have to be learned by heart; the truth lay in the process of cognition itself, in the long historical evolution of knowledge, which rose steadily from lower to higher stages

of cognition without, however, ever arriving, through the discovery of a so-called absolute truth, at the point beyond which it could not go, the point where nothing more was left for it to do except to lay its hands in its lap and stare at the absolute truth now attained. . . . Each stage [in thought] was necessary, therefore—proper for the time and conditions to which it owed its origin; however, it was untenable and unjustifiable with respect to the new and higher conditions, which were gradually evolved out of their own internal structures. . . . So this dialectic philosophy put an end to all ideas of a final, absolute truth and absolute human circumstances corresponding to it. Before it nothing stands as final, absolute, holy. . . . Nothing stands before this philosophy except the unbroken process of becoming and passing, the endless march from the lower to the higher, the mirroring of which in the thinking brain is philosophy itself."

While it is true that Marx rejected the idea that history is the progressive revelation of the divine idea and boasted that he found Hegel standing on his head and put him on his feet, this intellectual and gymnastic achievement was not as revolutionary, from a philosophic standpoint, as Marx imagined. The Hegelian concept itself was the revolutionary element, a concept equally opposed to the *Standesordnung* of scholastic economists, to the natural order of the Newtonian world imagined by the classical economists of England and, if Marx had been daring enough in his logic to see it, to the positive socialist order to be established after "the death knell of capitalism" was rung. Such was the underlying dynamic of Marxian and Engelsian socialism, which possessed the philosophic validity inherent in Hegelianism, spread beyond the borders of economics into history, ethics and sociology, and when fortified by the Darwinian concept of evolution in the animal kingdom became a powerful intellectual force in the mid-century, both dissolvent and constructive, combining faith in the iron laws of nature with the divine hopefulness of the theologian.

IX. From still another angle, that of anarchy, capitalist economy was attacked, Proudhon, the poverty stricken son of a French cooper, taking the lead. Yet in many ways it was merely the extension of Manchesterism to a logical conclusion; the state should not even protect property and life; it should be abolished, and the free operation of natural forces, limited

perhaps by voluntary artificialities, would create the ideal order of things. Proudhon even went so far as to declare that domestic questions could be solved by a bureau of statistics, and that international questions could likewise be resolved by a bureau of international statistics. While there were elements of social control in his scheme, anarchy, the abolition of political dominion of man over man, was the goal which he set before him and the end toward which he thought society was moving.

More violent in temper and methods, still more clear-cut in his anarchist goal, was the Russian agitator Bakunin, who appeared on the revolutionary scene of western Europe during the upheaval of 1848. In his own words Bakunin summed up his attitude to classical economy and Marxism: "Marx is an authoritarian and centralizing communist. He wishes what we wish: the complete triumph of economic and social equality, however, within the state and through the power of the state, through the dictatorship of a very strong and, so to speak, despotic provisional government, that is, by the negation of liberty. His economic ideal is the state as the sole owner of land and capital, tilling the soil by means of agricultural associations, under the management of its engineers, and directing through the agency of capital all industrial and commercial associations.

"We demand the same triumph of economic and social equality through the abolition of the state and everything called juridical right, which is according to our view the permanent negation of human right. We wish the reconstruction of society and the establishment of the unity of mankind not from above downward through authority, through socialistic officials, engineers and public technicians, but from below upward through the voluntary federation of labor associations of all kinds emancipated entirely from the yoke of the state." Illuminating this creed by more technical knowledge, Bakunin's compatriot Kropotkin forecast an anarchistic society combining fields, factories and workshops in a single system of communal economy, decentralized and federated, employing no engines of state in direction and control.

An analysis of this system of thought shows that it unites in itself the natural order of the English economists carried to a logical extreme, the equalitarianism of the Rousseau school, and the hatred of the state common to despotic countries where the state was personified in an absolute ruler. From an economic and techno-

logical point of view it was pre-capitalist; that is, it rejected with the scholastics profit making as the prime mover of economic activities, and the society forecast by it was a simple combination of agriculture and petty workshops. When Russians visualized it they usually saw the Czar and the landed nobility swept away and the villages and handicrafts left intact as they had existed for centuries. It was built upon a localized primitive economy, not on a national order, to say nothing of international finance and exchange. Yet it agreed with classical economy in its faith in the excellent outcome of self-directed economic activities undisturbed by state interference. Perhaps its vogue and influence were due to its services to capitalistic opposition to state intervention rather than to the intrinsic power of its appeal as a system of thought.

A fifth attack on capitalistic economics came from the direction of nationalism tinged with socialistic ideas. Practically the work of bringing about political unity in Germany and Italy was entrusted by destiny to leaders of feudal affiliations; in Germany the Prussian state, in Italy the Sardinian state, took the leadership; in both countries the bourgeois, while desiring unity, hoped to effect it by constitutions rather than the sword and were, therefore, more or less in opposition to the actual process of national unification. Bismarck's troubles were with the bourgeois, not the Prussian landlords. In his conflict with the middle classes he even flirted with the fourth estate and cooperated with Lassalle in the formulation of policies. Springing from a landed family, serving the Prussian state, constantly struggling against the restraints of mercantile liberalism, Bismarck could not possibly adjust his mentality to the economics of Manchesterism. The use of the state for economic ends had been a historic practise in Prussia; Bismarck continued it. While socialism was a rising power, he helped to direct it against the bourgeois; after it grew into a menace he made concessions by furnishing instalments of state socialism. When Schmoller became a professor of political economy at Halle in 1864 and Wagner took up his duties at Berlin six years later, state socialism was already in the air, making German economic thinking well-nigh impervious to the reasoning of the Manchester school. That which seemed perfectly "natural" to Cobden did not seem "natural" at all to Lassalle, Bismarck, Wagner and Schmoller, and for reasons "natural" to both situations.

X. Passing outward from economics to the wider implications gathered under the head of sociology, we encounter the same operating forces of circumstantial reality and the same intellectual climate as the conditioning environment. Indeed it is difficult to distinguish sociology from economics on the one hand and from socialism on the other. Comte, who may well be called the founder of the discipline, was a disciple of Saint-Simon, the French utopian socialist; and yet he was at the same time a student of the natural sciences and the naturalistic philosophy which had furnished nutriment for classical economics. His concept of the three stages of social evolution—theological, metaphysical and positive—reflected with striking precision the scientific assurance of his period; and the outcome of his sociology, an ideal society tinged with religion, was appropriate to a thinker early trained in the utopianism of Saint-Simon. Yet by escaping the iron laws of Newtonian economics Comte came more nearly to forecasting the trend of social thought and practise than did his contemporary Herbert Spencer. By emphasizing the contention that neither economic nor political reorganization would alone lead to the goal indicated by social evolution, and by laying stress on intellectual readjustment and universal education, he helped to rescue both politics and economics from the sterility of mathematical inevitability so attractive to the classical economists and the Marxians. More than that; in spite of his vagaries, he widened the periphery of thinking about human society, gave a certain social wholeness to speculation about it, and, by pointing out the synthetic character of modern civilization, helped to prevent an overemphasis of ideas or facts.

It was the breadth of view which characterized Comte, no less than his vagaries, that led the English rival Herbert Spencer to declare that his chief debt to the French sociologist was negative. Spencer's resistance to Comtism was the opposition of a practical and confirmed exponent of Manchesterism, classical economy and materialistic science. In explaining "how little influence Comte's teachings have had on scientific thinking in England," Spencer said with a certain air of hauteur: "Those whose education has been mainly literary are unable to realize the mental attitude of those whose education has been mainly scientific—especially where the scientific education has been joined to scientific tendencies and a life of practical

science continually illustrating theoretic science, as in my own case." In this single sentence Spencer revealed his strength and weakness. Here is the strength of Cartesian mathematics, Newtonian physics, Ricardian economics and Darwinian materialism; here is the weakness of a mind which imagines that the kaleidoscopic motions and emotions of life can be covered by statements akin to chemical formulae in exactness. It was in this spirit that Spencer, a child of the utilitarian age, applied, after a fashion at least, what purported to be rigid canons of thought to the origins of religion, to the rise and development of ceremonials, to social, military and industrial institutions, and to current political practise. The range of his influence was proportioned to the dominance in various countries of the modes of life and thought which he represented; and his work ran the full gamut of scientific expressionism throughout the world. Even if it had not been given the powerful aid of Darwinism its pressure in the currents of thinking would have been immense.

XI. Through the historical writing, no less than through the economics and sociology of the period, rang repercussions of the great political and economic struggles of the age, making necessary many adjustments in the heritage received from the preceding epoch. In the pages of the English historian Macaulay could be traced the long conflict between the capitalistic and landed classes in England and the evolution of their associated ideologies. The passing of the military caste in the island kingdom and the rapid advance of parliamentary government favored the cultivation of research in political institutions, which finally flowered in 1873 in the publication of the first volume of Stubbs' *Constitutional History of England*, the progenitor of a long series of institutional studies. Although the general outlook was widened by Buckle, whose *History of Civilization in England* (published in 1857) aroused a sensation in two hemispheres, it was found on examination that his structure of thought had been reared on economic Manchesterism and the hypothesis of materialism, and reflected current political and theological controversies. Across the Atlantic, in the United States, the Democrats found their historical oracle in George Bancroft (trained in Germany), who united some of Hegel's dynamics with the optimism of Jacksonian democracy; while at the same time the past was recon-

structed for the Whigs by Hildreth, a scholar brought up in the federalist school. In France the historical works of Thiers, Guizot, Thierry, Mignet, Lamartine and de Tocqueville bore deep traces of the controversies which had shaken France since 1789, the new social ideas which stirred Paris to a socialist revolt in 1848, and the contests which the respective authors witnessed. Indeed most of the French historians were statesmen or politicians and mingled the emotions of the forum with the ratiocinations of the study. Their great theme was the justification or condemnation of the upheaval of 1789 with corresponding pertinence to contemporary issues.

If German historical scholarship appeared to be more thorough and more profound it by no means escaped the impacts of the day. In the dark hour of humiliation at the hands of the first Bonaparte, German nationalism, personified best perhaps in Fichte, girded itself as a young giant, making use of universities and all disciplines of thought to strengthen the state for liberation and to inspire the masses with confidence in their native powers. As Cunow says of von Maurer, this school of thought sought in the German past for the secret of a better future; here is the root of the Teutonic theory of racial genius which dominated so much of German thinking of the nineteenth century and passed swiftly into England (a partner of Prussia in the destruction of the Latin Napoleon) where it exfoliated richly in the works of Palgrave, Kemble, Freeman, Stubbs and Green; and then leaped the Atlantic to Johns Hopkins University where it made a powerful impression on a generation of American historical scholars between 1876 and 1900. Besides developing inquiries into Teutonic origins, the German historians of the period, taking note of the struggle for parliamentary government raging on every hand, also laid great emphasis on institutions; hence the monuments of erudition erected by Waitz, von Maurer, Brunner and Gneist, which were so assiduously studied across the channel by English contemporaries. Although Ranke announced a new ideal when he declared it to be the business of the historian to see things as they actually had been, his underlying philosophy was more akin to the faith of Martin Luther than to the materialism of the French and English philosophers (Friedrich Meinecke, *Die Idee der Staatsräson in der neueren Geschichte*, Munich and Berlin 1924, p. 471). After Hegel struggled through the phenomenology of the spirit and the

philosophy of history he came out with an apotheosis of the Prussian monarchy!

From a strictly scientific point of view the most important achievement of the period was the beginning, in various countries, of great collections of documentary and source materials and the foundation of scholarly journals for the publication of minute researches, thus undermining in detail the huge structures erected by the generalizers of the epoch. But it could scarcely be said that this new documentation exercised much influence on the histories of the period done in the grand manner—the histories that made the deepest impression on social speculation and practise. “Scientific history,” claiming a kind of disembodied emancipation from temporal affairs and general ideas, belonged to the future; thousands of doctoral dissertations and specialized studies were to prepare the way for its short-lived triumph near the close of the century.

XII. With respect to the political theory of the period under consideration, the four points of the compass were: the individualistic anarchy of Bakunin and the socialist dictatorship of Marx, the capitalist-constable state of English Manchesterism and the feudal-police state of Prussianism. All other schemes and themes were but variations from these four types of opinion. Whoever starts on a journey through the tangle of political speculation must take his guidance from these fixed points of observation. It matters not whether it is the theory of Fichte, Ranke, Schelling, Hegel and Treitschke, heavily laden with learning and philosophy, or the laborious periods of Karl Marx fusing German ideology and English capitalistic experience, or the dogmatic assertions of Bakunin, or the reasoning of Herbert Spencer’s *Social Statics*; the animus is there and the Q.E.D. of the syllogism is implicit in the assumptions of the first assertion. The political thinking of the age mirrored its realities, with their varied gradations and circumstances. Having long served as a shield of defense for a prevailing order or a foil of attack upon some dominant arrangement in politics, political theory did not emancipate itself from its heritage. If there could be a science of politics akin to the science of physics, no philosopher of this period discovered it.

Perhaps the nature of what passed for “scientific reasoning” respecting the state during the epoch can best be illustrated by the following propositions advanced by Spencer: “Every-

thing in nature has its laws. . . . As with man physically, so with man spiritually. . . . Mind has its laws as well as matter. . . . As with man individually, so with man socially. Society as certainly has its governing principles as man has. . . . Analogy shows us that they must exist. . . . The laws of society are of such a character that natural evils will rectify themselves by virtue of a self-adjusting principle. There follows the inference that it is needful only to maintain order—that the function of government is simply to defend the natural rights of men—to protect person and property—to prevent the aggressions of the powerful upon the weak—in a word, to administer justice.”

Far less tenuous in its thinking was the school of historical jurisprudence founded by Savigny and his generation of German jurists. Two special features of their field saved them from the vagaries that plagued speculation in politics. The first was the logical and almost artistic perfection of the Roman law which they made the object of such profound and affectionate study. Compare, for example, the *Corpus juris* exploited by Savigny with Machiavelli’s *Prince* so assiduously cultivated by Hegel and Fichte! The second was the practical requirements of their profession which held the lawyers nearer to the business of living and working. The first half of the nineteenth century was a period when the old confused laws of feudal relations were being transformed to meet the exigencies of modern economy and codified for the convenience of legislators and practitioners. Echoes of the Code Napoléon reverberated through Germany and Austria to Budapest and Belgrade on the far banks of the Danube. It should not be forgotten that Savigny, besides being a professor in the University of Berlin, was also a politician, a Prussian official from time to time, and above all minister for the revision of legislation from 1842 to 1848. Doubtless experience as a public official or legal draftsman would have altered the angular political theories of Fichte, Marx, Bakunin and Herbert Spencer, bringing them more near to the inevitable course of things. Historical jurisprudence was a powerful corrective to loose political speculation, a useful guide to exact thinking about social relations capable of legal definition, a check on facile hopes and, equally, on facile aspirations for a return upon the past.

XIII. Strangely involved with all the events and disciplines reviewed above was the doctrine

of evolution associated with the name of Darwin, including all its implications for anthropology, psychology and social science. "Involved" is the just word, for besides exerting a profound influence on all departments of thought, Darwinism was a product of this age—the age of early capitalism, materialism and sharp social conflicts. In fact, Darwin himself confessed that while he owed much to his observation of the struggle for existence in the animal world, the idea of natural selection came to him after reading Malthus. In a letter to Haeckel Darwin wrote: "Having attended to the habits of animals and their relations to the surrounding conditions, I was able to realize the severe struggle for existence to which all organisms are subjected. . . . With my mind thus prepared I fortunately happened to read Malthus' *Essay on Population*; and the idea of natural selection through the struggle for existence at once occurred to me." And what was the essay by Malthus? A cold, scientific study originating in the passionless pursuit of truth? On the contrary, it originated as a political and social tract to combat the "dangerous" social doctrines of Godwin. Thus inspired in part at least by a class controversy appropriate to the age, Darwinism naturally lent sanction to the tooth-and-claw struggle of Manchesterism, to the individualistic gospel of early capitalism.

At the same time Darwinism was the logical outcome of a line of scientific research and thinking which ran far back into the eighteenth century, to say nothing of Greek and Roman concepts of biological development. It was foreshadowed in the work of Buffon, Erasmus Darwin and Lamarck. It was worked out to some extent independently by Alfred Russel Wallace. Its advance was promoted by the geological investigations of Hutton and Lyell, the botanical studies of Linnaeus and the innumerable researches of specialists in Europe and America, not overlooking the debt to Asa Gray of Harvard, so generously acknowledged by Darwin himself. All the thinking of the age respecting plant and animal life was subject to the pressures of contemporary natural science and finally eventuated in the *Origin of Species* published in 1859. Inevitably this feverish scientific research forced its way into speculations respecting the origin, development and destiny of mankind. All those who thought widely in that period were profoundly affected by the influences which produced the doctrine of natural selection and survival of the fittest.

Darwin's second great work, *The Descent of Man*, although it did not appear until 1871, was likewise a product of this age, especially of anthropology as developed by the inveterate German traveler and student Bastian, his Marburg compatriot Theodor Waitz, Haeckel at Jena, Canestrini and Barrago in Italy, Lubbock, Tylor, Spencer and McLennan in England. And this anthropology itself was in no small measure the fruit of the commercial and exploring age, of innumerable voyages opening up the most distant and backward places to travelers and observers, of continuous traffic and intercourse between Europe and all quarters of the globe. By swift clippers and later by steam vessels, merchants, naturalists and curiosity seekers, as well as preachers and priests, sailed for all known parts of the earth; secular observers supplemented the reports and interpretations of missionaries, breaking down the limited, parochial views of western Europe and bringing to bear upon social thought a wide knowledge derived from the study of human societies in all stages of development. Like a gust of fresh air anthropology swept through the social speculation of Europe burdened by thirty centuries of limited and traditional theorizing concerning the nature of man and human society, thrusting new ideas into the European heritage and into the rationalizing processes of a period beset by social conflict. Though thrown for a time into violent collision with theology, the new science of anthropology made steady headway as the most emancipating discipline of the epoch. World travel, world geography, world geology and world anthropology were doing more to reveal the nature of man to himself than all the fine-spun speculation that had been accumulated by the opening of the nineteenth century.

XIV. If from departments of knowledge, which are after all highly fictional divisions, we turn to the great ideas of the period which penetrated all branches of thought, we find that they may be conveniently summarized as follows:

State ideology, developed around the Prussian monarchy, especially by Fichte and Hegel, in a time of national uprising against Napoleonic domination and advancing to the state socialism of Bismarck, Lassalle, Wagner and Schmoller.

Nationalism, promoted particularly by the struggle for unity in Germany and Italy.

Anarchy, or the negation of the state, in the decidedly limited form of Manchesterism and the logical and violent form of Bakuninism.

Proletarian socialism, erected into a system by Marx and Engels, and projected on the political stage with the founding of the first International in 1864.

Evolution, from the universal flux of Hegelianism to the systematic naturalism of Darwin, working widely in all departments of thought.

Materialism, with antecedents running back to the Greeks, especially promoted by the philosophers of the eighteenth century and the natural scientists of the nineteenth century, reaching pontifical assurance in the work of Büchner.

Christian ideology, the ethics of the fixed

order, with the scholastic theory of just price and just wages as its essential economic creed.

The idea of progress, launched by Abbé de Saint-Pierre early in the eighteenth century, exploited by Saint-Simon in a socialist direction, by Spencer in the individualist direction, and taking its place finally as a kind of Providence in skeptical circles.

Out of such ideologies, composed of many strands and formulated with varied illustrations, was woven the social thought of the first half of the nineteenth century, a part of the heritage with which all must work in our day.

CHARLES A. BEARD

X

Nationalism

The great changes in social and political thinking during the generation following upon the last years of the sixties remind one of a famous passage in that standard source of the history and psychology of liberalism, the *Autobiography* of John Stuart Mill. The author relates (ch. v) how, through an involved and painful process just after the completion of his twentieth year, he became aware of all the cruel one-sidedness of that extraordinary and precocious education bestowed on him by his father, and how it dawned on him "that the imaginative emotion which an idea, when vividly conceived, excites in us, is not an illusion but a fact, as real as any of the other qualities of objects; and far from implying anything erroneous and delusive in our mental appreciation of the object, is quite consistent with the most accurate knowledge and most perfect practical recognition of all its physical and intellectual laws and relations."

What happened so early in one man's short lifetime, it took the mass of liberally educated European and American thinkers several generations to discover. For a while the ideas of French materialism and English utilitarianism seemed about to flood all civilized mankind with the standardized harvest of their social and political convictions and habits. But precisely at this time the tide began to turn slowly, yet steadily, and ideas and conceptions that appeared to be "illusions," dead and gone, began unexpectedly to make themselves felt as "facts."

If one tried to find a broad preliminary formula indicating the chief lines along which this change affected the social sciences, one might say that the simpler and more vulgarized the liberal doctrine of government and society became, the more it was in danger of being overcome on both its wings by two forces that had been its dangerous critics almost from the outset. One of these was the "organic" conception of social growth first strongly voiced by Burke and the teachers of the Restoration. The other was the "socialist" interpretation introduced by the great English and French pioneers in this field. It is surely not without significance

that the political development of the leading capitalist countries was marked, during this period, by constitutional readjustments of a closely parallel nature. In 1867 Disraeli's second election reform enfranchised the great mass of the urban working classes on whose support "Tory democracy" relied against liberalism. The same year Bismarck, on the advice of Ferdinand Lassalle, made an even bolder stroke in the same direction by incorporating in the new constitution of the North German Federation the same demand for complete universal suffrage that had been made during the Revolution of 1848. Finally what else is the meaning of the reconstruction period in America's history but a similar alliance of Republican conservatism, and even imperialism, with an overwhelming majority of the toiling masses who had been, a generation before, the main support of Jacksonian democracy? It is true that in America and still more in Europe, where socialism started directly organizing its own parties, the conservative-socialist alliance could only be either a passing event or a recurring ideal. But as such it had immense influence in weakening and modifying the hold of liberalism on the modern world.

One of the first prominent results of this influence was the rise of a new nationalism. From the point of view of revolutionary France and of English liberal world politics, national aspirations had been valuable only in so far as they tended to promote the growth of democratic government throughout the world or, to put it in terms of realistic political sociology, in so far as they furnished natural supports for the French and English governments of the period. And, correspondingly, it was found that in German and Italian movements toward national union the cosmopolitan leadership of the bourgeoisie and the intelligentsia far outweighed the influence of more radical and nationalist forces that came to the fore only in times of revolution and of war, and were dismissed again after successes as well as after failures. In contrast to all this, the epoch of the sixties is characterized, on the one side, by the definite victory of the

young German and Italian national governments, accomplished more or less directly at the expense of the last French monarchy; and, on the other side, by the menace of the Russian Empire and of the new eastern nationalism that raised a multitude of disruptive forces in the shape of "nationalities" in the Austro-Hungarian monarchy. The effect of the Franco-German War was not only to complete the eclipse of France and Austria-Hungary but also to complete the union of Italy and to abolish the limitations of Russia's naval power in the Black Sea, thus enabling her to unloose immediately the nationalist forces of the Balkans against the Turkish Empire. The new nationalism was not confined to the continent of Europe. In the England of Disraeli it took the form of that imperialism which not only gave India the imperial name and occupied Egypt but definitely halted the "Little England" spirit in favor of a creative development of the dominions based on self-government and a new consciousness of British racial community.

Second in order of time, though hardly of importance, were the economic implications of the new nationalism which have made the historians call the close of the century the neomercantilist age. In a very significant way the fundamental policies intended to inaugurate an age of shrinking tariff frontiers and of ever widening free trade, produced results exactly the opposite of those intended. The great "most favored nation" treaties between France and England (1860) and between France and the German Zollverein (1862) were equally unsuccessful, the first provoking the economic discontent that brought about the overthrow of the Second Empire, the second showing by the consequent ejection of Austria from the Zollverein the double edged workings of free trade inside and outside the areas of commercial treaties and customs unions. With but slight variations, such as the Morrison tariff in the United States and the Caprivian era of commercial treaties in Germany, the spirit of the period thus grew strongly and increasingly protectionist. There were other developments in the economic history of the time, such as Germany's social insurance, Russia's state railways and France's colonization activities, which recalled the economic leadership of governments in the mercantilistic states of the sixteenth, seventeenth and eighteenth centuries. Even in England the last great remnant of mercantilism had scarcely disappeared with the dissolution of the East

India Company (1857) when the new imperialism unconsciously went back to the Elizabethan models of state monopolized organizations of foreign trade in the creation of the big chartered companies of Cecil Rhodes and his African rivals.

All this was to prepare the way for startling transformations. The capitalistic economy which had so triumphantly spread with the destruction of the older mercantilism and the advent of the free competitive market in commerce, industry and agriculture was on the verge of reaching that new and different stage which has been described as the "high capitalism" of the twentieth century. A new and unheard of development of machine production, financial organization and marketing technique began to evoke new and unheard of economic forces, mostly in new places. An age of steel, instead of iron, dawned after the experiments of Bessemer, Kelly and Holley in America, and of Thomas, Gilchrist, William Siemens and Martin in England. In the later years of the period the perfection of the basic process shifted the center of European steel production from England to the German furnaces fed with the phosphoric ore of the newly acquired province of Lorraine. In precisely the same manner the new era of electricity was born and fostered in the laboratories of Werner Siemens and Emil Rathenau, and the analytical chemistry of coal was inaugurated by the scientific exploits of German universities and technical high schools. Lastly the growing volume of business was taking production and marketing out of the range of the individual entrepreneur, who had been the dominant figure of the competitive economy, and was leading it on to new forms of organization essentially monopolistic in character but as varied in appearance as German government-protected syndicates and American trusts struggling, successfully indeed, with a theoretically free-trade judiciary and legislation.

This tremendous expansion of productive powers was possible only in connection with the new movements of population. One who wishes to understand more than superficially the socialistic side of the neomercantilist epoch must keep his eye on the adjustments that took place in population. The nationalist fermentation of Italy and eastern Europe furnished the United States with the "new immigration" needed to supply its expanding business with cheap and docile masses of raw labor. The same effect was produced in Germany by an extensive process of

internal migration from the agricultural north-east to the centers of industrial production in the west, drawing in its wake a corresponding immigration, temporary or permanent, of still cheaper agricultural labor from Russia and Austria. Karl Marx and Friedrich Engels were not mistaken in applying the experience they had had of earlier English capitalism and the lessons they had learned from English trade-unionism to the new economic and political situation of their native country. In America radicalism took the form of agrarian movements like the free-soil and free-silver agitations.

Now when we remember that the social sciences represent the self-consciousness of society, and that political economy is the oldest and most developed among them, it is not surprising that we should find the structural changes of the society of the epoch most exactly mirrored in the new and very decisive turn taken by economic thought. After the disintegration of Ricardian teaching, brought about quite as much through popularization as through heterodoxy, the time was ripe for a reconsideration of that great body of doctrine called the "classical economics"; and in the sixties English, Austrians and Germans were busy laying the foundations of two huge new wings to be added to the old building on each flank; namely marginal economics on the one side, and the historical school on the other.

It is possible to interpret marginal economics as a reaction against the deadlock to which the classical theory of cost value had been brought by Karl Marx's powerful exposition of labor costs and the surplus of exploitation. Indeed one of the three founders of modern marginalism, Marie Esprit Léon Walras, was through his own father a direct heir to the typical kind of mathematical price theory which the French bourgeoisie had tried to set up in defense against the socialism of Proudhon. But surely if there had never been any French or German socialists, classical economics would still have reached a stage where it would have been in urgent need of restatement. That stage was marked by the passing of the limited period which, in the words of John Maurice Clark, "began with the breakdown of the mediaeval guild restrictions and ended with the growth of industries using large fixed capital." It was only during this period that economists could have been satisfied with the simple concept of value and price as being directly determined by elementary factors employed in the production of commodities. With

the advent of "large fixed capital" production, economic analysis had to fall back upon an earlier and more general, if less simple, aspect of the market, where the ever changing equilibriums of supply and demand would end in the apparently contradictory phenomenon of costs determined by prices. In fact the simultaneous inquiries which in the early seventies reconquered from oblivion the eighteenth century device of marginal analysis as an application of the differential calculus to economic reasoning, were only historically different approaches converging upon this goal of a new "subjective" theory of value and prices. William Stanley Jevons stands, as it were, in the middle, continuing, despite all his opposition to Ricardo, the old utilitarian tradition of the classical school, and so paving a way to the ultimate reconciliation reached by Alfred Marshall and F. Y. Edgeworth early in the nineties. On one side of Jevons, Walras, with the mathematician's aloofness from both realistic and psychological treatment, exerted a sobering influence which resulted in a *risorgimento* of Italian economics rather than in any more marked effect on France herself. On the other side, Karl Menger bequeathed to the Austrian school, of which he was the founder, that subtle but unmathematical psychology which in his country was a heritage of the best of Catholic scholasticism. There also were remarkable crossings and blendings among the three national streams, such as Auspitz's and Lieben's mathematical theory of prices, or Fisher's *Mathematical Investigations in the Theory of Value and Prices*. Correspondingly strong differences inside the national schools came to the fore. In Austria, for instance, the new method was used to attack the more complicated social problems of distribution, so that Menger's school after 1884 was more or less openly split into the more radical group committed to Eugen von Böhm-Bawerk's time theory of interest and the more conservative group inspired by Friedrich Wieser's conceptions of social productivity. Finally in Sweden Knut Wicksell prepared the return to an "objectivism" later perfected by Gustav Cassel, while American economics succeeded in keeping a rather independent position in which the English inheritance was tempered by the early influx of Austrian teaching chiefly by way of Smart's translation of Böhm-Bawerk's volumes on interest. But John Bates Clark's *Distribution of Wealth*, the outstanding work of the close of the century, evoked in support of its marginal pro-

ductivity theory the memory of the great German pioneer of the doctrine, Johann Heinrich von Thünen. After the model of the Verein für Sozialpolitik, founded in 1872, the American Economic Association tried, as in Edwin R. A. Seligman's early work on the theory of taxation, or F. W. Taussig's on the tariff, to connect theoretical economics with economic policy. On the whole America was the only country outside of Germany to do justice by the second most important movement of modern political economy, the German historical school.

It has been the fashion for some time to draw a rather sharp line between what used to be called the older and the younger historical schools of German economists. The former has been identified with the names of Roscher, Hildebrand and Knies; the latter, with the name of Schmoller; and the line of distinction has usually implied a "value judgment" of some sort on the superiority of the former as compared with the latter. Now there is indeed much to separate those older writers from later historical teachers and economists. Although on the surface they seemed as hostile to English classicism as the German university "cameralists" had been ever since Adam Smith's time, they had really a great deal in common with their English post-Ricardian contemporaries, being genuine philosophical liberals with a fairly marked theoretical interest. This is precisely the reason why the historical school did not exert its main force until this generation had passed and the group led by Schmoller took its place. In spite of the famous "battle of methods" between him and the Austrians in the eighties, Schmoller's service to economics in the new German Reich was more closely akin to the new departure of Menger's subjectivism than one might expect. It was another part of the great reaction that had set in against the one-sidedly deductive methods of orthodox utilitarianism and that had been philosophically led on in England itself by the inductive logic of John Stuart Mill. In fact there is the same craving for realism, after an age of self-satisfied "pure" reasoning, in the opening pages of Menger's *Principles* as there is in Schmoller's contemporaneous work on the small crafts in Germany; and their difference, if momentous, is less in the ulterior aim of economic research than in the theoretically rather careless belief in factual inquiry that made Schmoller and the other founders of the Verein für Sozialpolitik disinclined to wait with Austrian patience for

theoretical solutions of the social problems of the new Germany. That Schmoller was as little of a government economist as his Austrian colleagues, who in many cases served their government even in official cabinet positions, is proved in part by his campaign against the social aloofness of Treitschke, the official historian of Prussianism. His position is even more clearly indicated by the fact that both he and his associates in what their opponents called *Kathedersocialismus* were deeply influenced by the constructive side of the spirit of the great German socialists. Instead of viewing the historical school, as is too often done, exclusively in the light of Schmoller's latest period—the period of extensively organized research in the process of Prussian history that really belongs to the succeeding century—one ought to think not only of Schmoller in his entirety but of the whole breadth and depth of the work done in a spirit of friendly rivalry, and not seldom of opposition too, by the other masters of "historical" economics in Berlin, Munich, Strasbourg and Halle. There was Adolph Wagner, most theoretical and (scarcely by coincidence) most radical of all, who in the wake of Karl Rodbertus sustained social criticism on the basis of the Ricardian theory of rent. There was Lujo Brentano, convinced free trader, who yet gave the English the first theory of their trade unions. There was Georg Knapp, historian of agricultural emancipation, whose state theory of money comprised a century's experience of managed currencies. And, lastly, there was Johannes Conrad, whose eminence as a teacher has left a considerable impress even upon many non-German countries, especially America, where he sent Patten to revive the protectionist ideas of Carey. On the whole, although the training of most of the older American economists in the German historical school may have actually had only a slight influence upon them, and the thought of men like Emile de Laveleye, Charles Gide and Emile Levasseur in Belgium and France was at that time certainly much more akin to the German than to the American spirit, there is probably no escape from Schumpeter's conclusion that the deepest meaning of the German effort has nowhere been better resumed and perfected than in the empiricism of the American institutionalists of our day.

It must not be forgotten that since the days of the physiocrats and of Adam Smith there had been a tendency to regard the other social sciences as an outer group circling about the

specialized and segregated science of political economy. Compared with what their state had been in the eighteenth century, their growth had been rather retarded by the concentration of public attention on their "dismal" sister. And not until the latter, with the increasing want of historical and realistic treatment, was again reminded of her more general social backgrounds, could there be sufficient interest created in the progress of the sister branches that were to clear up those backgrounds. Naturally the triumphant development of economics forced itself for a long time upon these other branches as a model of "exact" science. They had only to go one step further back to find the model of the natural sciences that had been so suggestive to economics itself. Thus, while much of the economic work of the period was in rebellion against the older types of the mechanical concept of society, this concept was far from having lost its influence over the rest of the social sciences, and some of the best work done by them could never have been achieved except with the help of naturalists and naturalist thinking.

This is of course especially true of those aspects of social life which are conditioned by the more or less pure physiological data of human nature and its surroundings. These data had from the eighteenth century onwards been viewed preeminently in the light of the individual *homme machine*. With the advance of socialism their significance came to be regarded more and more from points of view that transcended the individual and that were represented mainly by the two great biological doctrines of evolution and of the social community. As to the first, Darwin's mechanical theory of natural selection remained supreme at the close of the nineteenth century, and its application to social problems of history and politics fascinated the philosophers. As to the more markedly social and contemporaneous manifestations of human life, naturalism seemed to lend itself to yet another and still more important series of conclusions. It furnished the basis of that "materialism" which the German socialists caught at so eagerly as definite proof of the hegemony of economic conditions in society and of the complete dependence on them, as a half illusory "superstructure" (*Ueberbau*), of the whole realm of cultural, moral and religious values.

Against this general background the history of the several social sciences during the period naturally follows the most diversified tendencies. The large comprehensive science of social rela-

tions that had been attempted by the Saint-Simonians and by Herbert Spencer under the much criticized title and program of sociology, had in the fullness of the age of liberalism arrived at as dead a level as liberalism itself. In the case of Comte the inborn mysticism of Saint-Simon's school had definitely overthrown the democratic ideal in favor of a new autocracy of scientific leadership; while Spencer's more jejune, but also still more mechanical, panacea of peaceful industrialism has been accused by Albion W. Small, probably with some justice, of being responsible for the remarkable barrenness of English sociological work during the next generation. It is significant of the interlocking of the social sciences that what there was of a new impetus to sociological theory in England came from the neighboring fields of specialistic social inquiry. Patrick Geddes in Edinburgh took up the "regional and civic survey" type of research propagated in France since the fifties by Frédéric Le Play. Edward A. Westermarck in Finland brought the methods of continental ethnology to bear on the problems of the history of the family and sex relations which had up till then, through the methodical shortcomings of L. H. Morgan's American Indian studies, been chiefly used as props for the dogmatism of the German socialists. Political science, in writers like T. H. Green and L. T. Hobhouse, succeeded in outgrowing, by fruitful discussion with continental learning, the traditional moralism of Paley. And earlier and more powerful than all these, comparative jurisprudence gathered the scientific harvest furnished by the administration of the British Empire in Sir Henry Maine's great and at least theoretically lasting discovery of the primitive village community and of the law of progress from status to contract.

In 1887, in Germany, Ferdinand Tönnies, long familiar with Hobbes' realism of social concepts, enunciated his famous theory on the succession of *Gemeinschaft* and *Gesellschaft* that has swayed German sociology and kept it in touch with international sociological thinking ever since. Just enough of a liberal rationalist to put philosophical and statistical generalization above historical vision, of a social critic to denounce liberal complacency, and of a conservative psychologist to feel the foundations of society in the simple and primitive, Tönnies occupied an unusually advantageous position amid the cross-currents of social controversies at home and abroad. But for the moment it was precisely this balance of mind and height of

philosophical aim that postponed his popularity, if not his influence, until well into the twentieth century, while the official leadership of German sociology passed from the Spencerian liberalism of P. von Lilienfeld and G. Schäffle into the hands of the Austrian racial sociologists L. Gumplowicz and W. Ratzenhofer. Children of the same social and political unrest as the economists of Karl Menger's school, these two men, one a Polish Jew, the other a German officer, greatly and deservedly impressed the world of the social sciences by summing up, as it were, the political situation of the Austro-Hungarian state in the striking, if one-sided, formula of racial or national group interests blindly drawing individuals into economic, social and political stratifications. And in this case also, Austrians were certainly offset by what might be called a Prussian or north German group of sociologists, although here psychological finesse happened to be on the side of the latter, after having been practically discarded by racial sociology. There is perhaps no other proof so convincing of the genuine fertility of the historical school as that it should have brought forth, at least indirectly, the first systematic attempts at execution of its proposal to treat economics as part of sociology. Only then the "historical materialism" of Karl Marx began to be replaced by something both more critical and more inclusive than itself. As a pupil of Adolph Wagner, Franz Oppenheimer laid out the ground plan of his "liberal socialist" system of sociology by which the "political economy" of feudal landlordism took the place of capital as a monopolizer of labor, and so might be overthrown by the "pure economy" of harmonious competition. Starting from the ranks of the Schmoller school, George Simmel rounded out the century with that most decidedly economic, and at the same time most systematically sociological, of all his works, *The Philosophy of Money*. Last but by no means least, Max Weber, severe critic though he was of Schmoller's lack of system and easy governmentalism, clearly showed by his early work in ancient economic history and modern agricultural policy that the germs of his later encyclopaedic range of sociological induction lay in the common stock of the "socialists of the chair."

While thus German and Austrian sociology, despite all conflict, was held together by the economic issues of the "social question," the sociology of France after 1871 had, above all, a political and cultural task. With the relapse of Comte into mysticism before its eyes, a new

generation of sociologists was found to resume the exploration of the rational and democratic possibilities of social progress by means of education that had been the driving force of social thought in France from the time of the *encyclopédistes*. This impulse became the central idea of the two social philosophies of Gabriel Tarde and Emile Durkheim. Tarde, a lonely worker using the scientific foundations laid down by Spencer, produced what is very imperfectly called, after one of his books, the theory of imitation. (All depends on how imitation is set in motion by the original forces of invention, in a multiplicity of systems that remind one of the "vortices" of his countryman Descartes.) Durkheim, on the contrary, rallying the full forces of national learning and instruction in an effort to create a scientific foundation for a new secular education, went directly to mental laws, creating a *fait social* in the mind of primitive societies, in his search for social levers of equal power with those of the great rival of laicism, the Catholic church.

In America, finally, the first energetic steps were being made by sociology "up from amateurism," as Small has justly emphasized. For the particular advantage, as well as difficulty, of America consisted in the broad philanthropic and humanitarian interest which American churches, schools and societies understood to be the true aim of a new science of society. The later spread of university and even school teaching in sociology, comparing so favorably with that in any European country, did not, it is true, begin until the next century. But meanwhile Comte's and Spencer's projects were patronized by scientists and doctors, ministers and judges, and there was one danger, which had been absent in Europe, that the spirit of patient reasoning and inquiry would be crushed under attempts to lay hold of the new study for the exclusive privilege of dilettante theories or reforming activities. In this situation it was the lasting merit of Lester F. Ward that he created for American sociological research a first model by, at the same time, making "social forces" a part of a comprehensive system of dynamic "nature" and yet never forgetting the "social" character that assigned them a role of their own, and in fact the highest of all roles in the dynamic universe. And it is hardly a matter for blame that Ward should have been inclined to transfer the naturalist's belief in the exactness of his results to the new subject on which he too had ventured as an amateur, and thus to establish his system

too dogmatically as the last word on the subject. Younger men learned from him and went beyond him. Against the Comtian concept of sociology as an aggregate of sciences, Franklin H. Giddings took from Spencer the cue for treating it as an underlying method and basic principle of study, although for him too, and once for all, Ward had broken the Spencerian spell of automatic social evolution. So there was ample room for further development, systematic as well as specialized. W. G. Sumner, who held the first chair of sociology at Yale, began the realistic study of classes and groups of population that might so easily have been neglected in a rapidly standardizing society and yet was destined to become one of the most important branches of applied sociology. E. A. Ross, relative and personal pupil of Ward, was started by him on his laborious career as a field researcher and traveling conqueror of ever new realms of sociological understanding. C. H. Cooley threw the first solid bridge over to the restlessly progressing work of American psychology and in doing so made enduring gains, like Simmel in Germany, in the difficult task of conceptional classification and nomenclature in sociology.

So far as the rest of what we now comprise under the wider notion of social sciences, history, jurisprudence and anthropology is concerned, the time had hardly come for even an outright recognition of their social viewpoint and consequent common relationship. Perhaps even some "progress backwards" was made by them from this viewpoint, under the stress of specialization as well as of opposition to former philosophical attitudes. But even these backslidings in the end served to arouse discussion and to give the period a general character of fruitful experimentation.

Thus in history the new national consciousness inevitably resulted in attempts to unite the knowledge of periods and institutions in a consecutive and comprehensive view of national development, the scientific conceptions of evolution and race, here as elsewhere, entering into a somewhat strange alliance with political purpose and emotion. Heinrich von Treitschke provided the bourgeoisie of the new German Empire with a historical outlook which, in its peculiar blend of monarchical and popular, centralist and racial elements, was the exact reflection of the "constitutional monarchy," while to Austria fell the task of basing the study of the Middle Ages on a new perfected "diplomats" (shaped from documentary sources), as a sort of parallel to the

theoretical technique of the Austrian economists. In Italy Pasquale Villari gave his *Storia politica* to the united nation. In France the standard national history of Ernest Lavisse resolved to a certain extent the historical debate of the parties, while embodying the mediaeval harvests of the Ecole des Chartes. And even in England and America the immense literary and scientific influence of J. R. Green culminated in a liberal apotheosis of the Anglo-Saxon political genius, before the work of John Seeley opened new vistas of imperial magnitude. But despite all this, definite claims were put forward on behalf of a non-political and a "cultural" principle of historical research by W. E. H. Lecky, the Irishman, and on the continent by Karl Lamprecht, who showed perfect willingness to cooperate, in his economic research, with all the other branches of the brilliant philosophical faculty of Leipsic University.

In jurisprudence, too, the stage lights were turned on the German generation that first, after the revolution, dared to incorporate the sum of nineteenth century legal development in a great civil law codification. Otto Gierke, although hardly satisfied with what the new code took up of "Germanist" doctrines, became both an international teacher and a national adviser in the bulky volumes of his *Genossenschaftsrecht*. In a chair at Vienna, on the other hand, Rudolph von Ihering started his brilliant career as a fearlessly modernistic interpreter not only of Roman law, but of the meaning of law generally, in terms of will, purpose and struggle, as opposed to Savigny's view of harmonious organic growth. And it was in an attack upon Ihering's rationalistic analysis of Shylock in *The Merchant of Venice* that Joseph Kohler first showed himself to be a powerful renovator of Hegel's philosophy of law in the modern garb of a universal student of primitive and comparative law. If in this way even the theory of law seemed to end in historical relativity, the science of public law, in the dawn of modern imperialism, was limited by the disposition of its interpreters to rest content with accounting for and comparing factual systems. While Paul Laband and Otto Mayer analyzed the positive contents of constitutional and administrative legislation, the early work of Georg Jellinek began to wander into the historical and comparative field, as did the great schools of R. Dareste and A. Esmein in France.

Last of all, anthropology (a name applied by the classical writers, like Kant, to a quite general, even psychological, knowledge of man)

began to give promise of becoming not only a universal basic social science but also a rival of sociology from the point of view of what purported to be the firmer standing ground of the physiological and biological roots of human existence. An increasing dissatisfaction both with the "objectivity" and the broader human significance of current political history made the effort to write the "history of civilization" or of "mankind"—the old aim of the *encyclopédistes* and later of Buckle—the center of anthropological efforts. Very little of all this has been able to survive on account both of a lack of methodical depth and of an inverse wealth and rapidity of material progress. Medical celebrities, like Rudolf Virchow and Armand de Quatrefages, tried to put to anthropological use the material furnished by the great standing armies of Germany and France, only to quarrel over the latter's rather preposterous theory of a *race prussienne*. More successfully Wilhelm Wundt left medicine to found the first laboratory of experimental psychology in Leipsic, and fully made up for what the philosophers thought his deficiencies in their field by a wonderful and stimulating interest in the whole gamut of social and historical anthropology. In fact he and his Leipsic colleague Friedrich Ratzel, the geographer, became the heads of a rich family tree of German and international schools with all the anthropological and ethnological branches. In contemporary England John Lubbock (later Lord Avebury) concentrated on the problems of the origin of civilization; E. B. Tylor brought back from Mexico the critical and comparative viewpoint that was to inspire the early work of W. B. Spencer and F. J. Gillen on the Australian, and of Franz Boas on the American, aborig-

ines; the Evanses carried the ethnological method into Celtic and Mediterranean archaeology; and J. G. Frazer made a first imposing attempt to take stock of the scattered treasures of folklore. Even comparative philology, which had hitherto given preference to dead languages and written sources, was touched by the impulse of Darwinian evolutionism and tried to join the "natural" sciences, keen on the "physiological laws" of change and relationship, under the influence of Max Müller, August Schleicher and the school of the "young grammarians" in Germany. And curiously enough, racial pride, which furnished the basis of Count Gobineau's protest against English cosmopolitanism at the culmination of the liberal age, drank life instead of death from the rising tide of naturalism and relativism, and in cultural philosophies such as Wagner's and Nietzsche's grew into an inseparable element of the new age of nationalism and imperialism. A striking illustration of this is found in the Russian novelist Dostoevsky, who even in the atmosphere of the Eastern church crowned the life of a revolutionary by fanatic assent to the creed of the pan-Slavists.

A great many short cuts had yet to be proved delusive before all the conflicting elements in the social sciences could be harmonized in John Stuart Mill's conception of political economy as "a branch of social philosophy so interlinked with all the other branches that its conclusions, even in its own peculiar province, are only true conditionally, subject to interference and counteraction from causes not directly within its scope; while to the character of practical guide it has no pretension, apart from other classes of considerations."

CARL BRINKMANN

XI

The Trend to Internationalism

I. HISTORICAL SETTING. From the days when Galileo first looked through his little brass tube, the more profound changes in the conditions as well as in the ideas of humanity have originated in the laboratory or study. It continued to be so in the twentieth century. Science was opening up further unexpected visions of reality that not only were shaking the thought foundations on which men had conceived the physical universe but were being translated into forms of power outmoding the mechanical triumphs of the age of steam. The atom was being dissolved into the electron. Matter itself, the solid firmament, was turning into the inconceivable swift dance of impalpable energies. The elements which had been taken for its immutable and eternal forms were shown by Rutherford and Soddy, following the discoveries of Becquerel and the Curies, to arise through a cosmic process of transmutation. Light and electricity were one with the "substance" of the universe.

These speculative triumphs went hand in hand with practical applications. Here too electricity played a dominating part. It submitted to being harnessed without being understood, and it was capable of being utilized in myriad ways. When generated from water power it could never be used up, unlike the resources of coal and oil. It was clean and simple and amazingly convenient. It could annihilate space, for its modes of communication were as swift as light itself. With the aid of gasoline it made possible the automobile and the aeroplane, and it was applicable to every other form of transportation. There seemed no service which it could not provide, no human toil which it could not alleviate. Thus it was performing two functions of peculiar social significance. It was creating a less laborious and yet more complex civilization, and it was bringing the foci of social influence into continuous and immediate contact with one another and with the ends of the earth.

The applications of sciences, progressing in many directions, were the source of new wealth and new economic security. They made practicable the ideal of a minimum standard of living

for whole nations, an ideal which until the later nineteenth century had never been more than a vain dream. In Europe a new conception had arisen of the state's duty in this regard. The example set by Germany in the eighties, in the establishment of sickness and accident insurance for its working population, was extensively followed in the years before the Great War. Austria had quickly accepted the German principle. Now, in a series of acts from 1906 to 1911, it was adopted by England, including workmen's compensation, old age pensions, sickness insurance, and the beginning of unemployment insurance. National provision of social insurance was taking form all over western Europe, in France, in Belgium, in Switzerland, in the Scandinavian countries and in Italy.

Internally the state was adapting itself to the new conditions. Externally it was bound by traditions which refused to yield to the new demands upon it. In the early twentieth century the most flagrant revelation of the "lag" of tradition was found in the obstinacy with which the nationalistic policies of sovereign states refused to recognize the necessities of an international civilization. An international economic system had come into being, and in spite of national trade restrictions was growing always greater. The consciousness of the unity of the modern world was finding cultural expression and was being reenforced by the cooperative quest of science. But the political guarantees of this institutional system were utterly insecure, and the various attempts to found a world order broke vainly against the enthroned dogma of the nation state. There were of course international agreements regulating trade and commerce, telegraph, telephone and wireless communications, patent and copyright, and so forth, but as regards the relations of states themselves to one another no satisfactory advance was made.

The close of the nineteenth century had witnessed the first great gesture of modern states towards the reduction of armaments and the establishment of a "real and lasting peace." By this date the problem of armaments had become acute, owing to the greatly enhanced

burdens of competitive expenditure which the changing technique of warfare imposed in answer to the ambitions and the growing fears of the nations. The First Hague Conference, summoned by Czar Nicholas for the year 1899, disappointed the hopes of those who looked for a resultant reduction of the burden and peril of armaments; and the consolation offered by the establishment of the Permanent Court of Arbitration proved in the event to be a tragic mockery. Moreover the conferees busied themselves, with the vain sedulity which jurists and statesmen have so often displayed in this regard, in enunciating "rules" of warfare. Nevertheless the gesture was significant and the fact that a Second Hague Conference was called in 1907 encouraged the more sober aspirations of those who expected a slower but eventually successful accord towards the peaceful organization of the world. In fact the second conference, which did not include the subject of armament limitation in its program and would not have discussed it at all but for the insistence of the American delegation, was entirely abortive. It is true that it gave further attention to the "rules" of war and the rights of neutrals, by-products whose worthlessness the Great War was inevitably to prove. Nor were more limited overtures, such as the proposal in 1912 of a "naval holiday" between England and Germany, of any avail.

Perhaps it was a mistake to assume that in the complicated jealousies and fears of Europe the reduction of armaments could precede the firm establishment of a true international system. The rudiments of such a system may be found in the arbitration treaties which were in considerable numbers concluded during our period. Many of these, such as the Anglo-French Treaty of 1903, were agreements to refer "justiciable" differences to the Hague Court. In the furtherance of arbitration treaties the United States, which stood happily apart from the European system of alliances, led the way. Roosevelt in 1904 and 1905 was active in negotiating arbitration treaties with the states of the world, though these were abandoned by him on account of senate amendments. But no fewer than twenty-five such treaties were negotiated later by Secretary Root. A notable effort was then made by President Taft to extend the scope of arbitration treaties to include issues affecting "national honor," the previous exception of which revealed the gulf still lying between the code of individuals and the code of nations. But, like Roosevelt, he met with opposition from

the Senate and dropped negotiations. In 1913 a new series of conciliation treaties was negotiated by Bryan, and twenty-one of these were finally ratified.

Meanwhile the European system of alliances remained the controlling factor of international politics. The "balance of power" maintained a precarious equilibrium. The Dual Alliance stood over against the Triple Alliance. The failure of Russia in the Russo-Japanese War diminished the confidence of France, but, on the other hand, the *entente* with England greatly strengthened her position, while at the same time the adherence of Italy to the Triple Alliance was growing doubtful. So the struggle for power went on without abatement until the event of Sarajevo. It took the World War to settle an obscure issue between Serbia and Austria, and long before it ended the issue was lost to sight in the incalculable and unprecedented conflict. Thus in the common disaster of the western world was the interdependence of all nations revealed, and with it the catastrophic futility of those unlimited claims of national sovereignty which refused to recognize the political necessities of the new civilization.

II. DEVELOPMENTS IN THE SOCIAL SCIENCES. The social sciences come so close to the interests and everyday affairs of men that they are peculiarly apt to reflect the prevailing tendencies of the times. At the beginning of the twentieth century the need for social interpretations and investigations was growing more obvious and perhaps more imperative, and in response to it the social sciences were greatly expanding. But they were expanding in the directions and according to modes which the spirit of the age dictated. One great determinant was the triumph of the physical sciences. It was increasingly felt that the social sciences must follow the methods of exact measurement which distinguished the sciences of nature. True, the data of the social scientist were not so amenable to this treatment as were those of the physicist, but this was the misfortune of the former, to be overcome as far as possible by such substitutes for exact measurement as the devices of the statistical method. Social researches accordingly tended to deal with those aspects of the social structure which could be subjected to a quantitative analysis. Economics, being in a favored position in this respect, represented the model which the rest endeavored to follow.

This attitude expressed a healthy reaction

from the confident generalization of the early days of the new sciences. But it was also one with which the age was in sympathy on other grounds. It was an age of experiment, seeking practical utility. It was interested in truth for the sake of results rather than from intellectual curiosity. Truth was a tree that like any other must be judged by its fruits. The Platonic idea that it was a beautiful thing to contemplate for its own sake found little favor. The pragmatic principle found characteristic expression in the philosophy of the age. Philosophy itself became practical. Thus alone could it be saved from contempt as the product of an idle imagination. The teachings of Schiller, of James and of Dewey were all directed against the aloofness of philosophy from the everyday world. And they had close affiliations with the anti-intellectualism which expressed itself, for example, in the *Creative Evolution* of Bergson.

This anti-intellectualism found great support in the tendencies manifested by the young and popular science of psychology. Conduct was discovered to have an emotional and instinctive, rather than a rational, basis. Above all, social phenomena had to be interpreted as the expression of habits and instincts rather than of an abstract principle called reason. This attitude was first emphasized by the psychologists who studied the crowd, like Le Bon or Sighele, or the folkways, like Sumner or Wundt. It was now applied to all aspects of conduct, particularly to ethics and politics and economics. It was made the basis of educational doctrine, eminently by Dewey. McDougall's *Social Psychology*, which first appeared in 1908, was essentially a study of the human "instincts," and had a remarkable vogue. At the close of our period the new psychological interpretation took the more extreme form of behaviorism, proclaimed by Thorndike in his *Educational Psychology* and by Watson in his book which gave the name to this movement.

The working out of these tendencies will be shown as we pass in review the contributions of the various social sciences.

III. ECONOMICS. At the close of the nineteenth century the marginalist doctrine, though subject to revision, still held the academic field. In the hands of men like Marshall it had seemed capable of meeting the complexities of the price system and even of interpreting the non-competitive aspects of the economic order. Accordingly, during our period, many economists

continued to rely mainly on the "marginal method," but the forces of criticism were gaining strength and at its close were already in the ascendant. This trend was encouraged by the increasing devotion of economists to factual research in specific fields, such as population, business enterprise, economic cycles, wage determinations and so forth, in which the assumptions of the marginal approach seemed to be unnecessary or irrelevant. Thus in Germany it was this tendency, rather than any alternative general theory, which weakened the domination alike of the historical and the marginal schools, creating groups of scholars attached to particular problems of research rather than to particular theories. We may cite by way of illustration the work of Harms and his associates in the establishment of the Kiel Institute, devoted primarily to the study of the specific problems of international economic relationships. Again in France, although economists like Aftalion ably upheld the value doctrine of the marginal school, the same tendency was manifested toward more detailed analyses of economic situations rather than synthetic constructions. But in fact the change of emphasis may be said to characterize the age rather than a particular country.

Consequently the theoretical interest tended to center around questions of method and of goal rather than of constructive interpretation. Was the inductive method adequate or was there still a place for general principles? Was the mathematical approach consistent with realistic economics? Was there a field of economic statics where exact principles of the Ricardian or Austrian type could be utilized as distinct from the field of dynamic actualities with its unstable equilibria and changing pressures? These were the questions which the clash of older and newer viewpoints invoked. It obviously precipitated new forms of the eternal methodological problem in the social sciences. In further illustration we may cite the question whether the idea of value itself, the core of older doctrine, should be abandoned, as Cassel was beginning to assert, in favor of the more specific idea of price. And the question which aroused much debate in Germany and elsewhere, whether economics as a science had room for a normative as well as a descriptive aspect, had also to be reckoned with.

The hold of the marginal principle had grown particularly strong in America, under the leadership of J. B. Clark. But here too by the end of our period the critical reaction was dominant.

Certain economists, while adhering in other respects to the marginal school, were influenced by the attacks directed at its psychological basis and refused to accept some part of its doctrine. Thus Davenport rejected the analysis in accordance with which the business entrepreneur evaluates the precise productivity of the various elements united in the process of production, while Fetter denied the hedonistic assumption and contented himself with the simple fact of choice or preference as a determinant of value. But other economists demanded a new orientation of economic theory altogether, joining hands with the critics of European countries who, seeking a new doctrine, remained meanwhile skeptical of the old. The marginalist theory seemed to those critics to be abstract and unrealistic. It appeared to them relevant only to static conditions, in spite of the attempt to adapt it to a "dynamic" society. Marginalism, it was felt, was a timeless theory, as true, if true at all, of the domestic age of production as of the capitalistic; but economic theory must explain the transition from the one to the other. In other words, it must be evolutionary. Critics like J. A. Hobson pointed out that the marginal analysis was least applicable to the most distinctive characteristics of the present economic order. The principle which computed the efficiency of isolable marginal units of capital or labor seemed to them quite unsatisfactory as applied to the "organic" system of large scale production, with its interdependence of units and advanced division of labor. To other critics its principle of subjective valuation appeared wholly inadequate in the light of a more realistic psychology which questioned the hedonistic calculus.

Thus the period became increasingly one of criticism. At its close there remained no dominant theoretical interpretation such as still reigned at its beginning. The field of economic research had widened and offered new opportunities which turned the great majority of the younger economists into specialists in particular branches of the study—in finance, taxation, labor, population, marketing, agriculture, transportation, corporation economics and so on. The practical problems of these branches involved the application of quantitative methods which seemed to many to have little need for the support of a general economic theory. There developed in fact a widespread skepticism regarding the possibility of the kind of economic law which had found its latest exemplar in the doctrine of the marginalist school.

Another tendency of the times antagonistic to clear cut classical principles was the growing recognition that the economic factor was inextricably inwoven in the whole social life, that therefore there was no autonomous sphere of purely economic phenomena obeying purely economic laws. This recognition was widening the range of economic investigation, but it was also making synthesis more difficult. Long before, it had entered the consciousness of J. S. Mill and disturbed the system of thought which he had inherited. The socialists, following Marx, had found a relatively simple way out of the difficulty by giving priority to the economic factor. Loria, for example, sought to establish "the economic basis of the social constitution." But the exploration of these interrelationships tended to show also how the social facts reacted on the economic. Whenever the economist, pursuing these interactions, became thereby a sociologist, as did Sombart or Max Weber, it was perilous to the simplicity of economic doctrine. And certainly it was rare to find a thinker who, like Tugan-Baranovsky, could accept the socialist position regarding the relation of labor to capital and still remain a marginalist.

But if the older type of theory lost influence, new points of view were emerging. What, after all, the critics had shown was that the structure was too complicated to be interpretable under a simple formula, that human motives were too involved for a simple calculus, that the simple assumptions of competition and mobility were in part defeated by the ignorance, prejudice, inertia of the economic individual, by his social involvements and by the growth of anti-competitive organizations. The marginal and classical theories were not so much superseded as modified. If the complexity of human motives and of changing institutions called for a more comprehensive theory, the answer could not be the rejection of theory altogether. Meanwhile the results of descriptive analysis and of quantitative research would provide a surer and broader foundation of facts on which the new synthesis must be built.

It is important to observe at this point that the quantitative analysis which was gaining ground in the early twentieth century was something entirely distinct from the mathematical analysis of "pure" economics. The mathematical economics represented by Pareto and Pantaleoni in Italy, by Moore in the United States, and in part by Edgeworth in England, depended upon hypotheses as clear cut as, and in fact generally

identical with, those of the marginal school. The quantitative economists, on the other hand, tended to abjure all general hypotheses, and where they employed mathematical formulae it was to achieve order and coherence in the presentation and interpretation of statistical data. There is in this respect a striking contrast between, for example, the work of Pareto and that of Mitchell. In Mitchell's work there is an emphasis on the manifold aspects of an inductive process which makes it at once one of the most characteristic and one of the most successful contributions to the economic theory of our period. It is significant alike for what it does and for what it fails to do, as showing not only the fruits but also the limits of the quantitative method. If one feels that there are aspects of the situation which remain uninterpreted, one feels also that this is because statistics, even in the hands of a master, cannot fully reveal the human conduct and human institutions in the study of which it is an indispensable aid.

If we set Mitchell's *Business Cycles* side by side with a contemporary study involving the deductive use of the marginal principle, such as Pigou's *Wealth and Welfare*, the contrast is again illuminating. Pigou thinks in terms of a national "dividend," and the problem is set in terms of the diminishing utility of wealth and of the effects on marginal productivity and marginal utility of a more equal distribution of this "dividend." The social tendencies of early twentieth century England are seen in his treatment of governmental intervention as a mode of reducing marginal inequalities and thereby of increasing the net utility of the total dividend or the total "economic welfare" of the community. The effects of monopoly are treated from a similar standpoint. The whole of his elaborate analysis is dictated by his initial hypothesis, and it alone makes possible the mathematical calculus which he introduces.

In the development of quantitative economics we may find two seemingly opposed tendencies. To some it seemed to involve the abandonment of those considerations of subjective valuation and of social utility which are not susceptible themselves of quantitative statement. The attempts to measure satisfactions, as in the doctrine of "consumers' surplus" put forward by Marshall and elaborated by writers like Wicksteed, were far from convincing. The quantitative analyst generally felt on surer ground when he was dealing with the objective phenomena of the price system, and various writers limited

their range of investigation to this sphere of calculable facts. On the other hand the census, the reports of governmental departments and commissions, and numerous social surveys were providing an increasing mass of statistical data regarding population, wealth and poverty, standards of living, the relation of productivity to hours of labor, the relation of health to occupation and income, and so forth. These data were indices of social welfare and demanded interpretations in terms of their social significance. Here the quantitative analysis was itself preliminary to a different type of analysis. Beyond the curve-fitting and the correlating there lay in wait the insistent questions of the social and economic motives, of the institutional changes and of the modes of living, which are reflected in the statistical facts. A qualitative analysis was needed to supplement the quantitative analysis. For it could not be at all assumed that the changes in the economic index, say of wealth or efficiency, measured corresponding changes in the achievement of social values or even of economic utilities.

Here in fact were involved assumptions of orthodox marginalism against which the advocates of an "economics of welfare" strongly protested. Marginalism had sought to prove that the worker, at least the marginal worker, received what he was economically "worth." Again it had seemingly demonstrated that the utilities derived from different consumers purchasing the same goods and from the single consumer in his disbursements on a variety of goods, were equalized at that terminus of all happy conjunctures, the margin. Moreover the attribution to the wage earner of a "specific product" which coincided in exchange value with the wages of the marginal worker was held by many to offer an interpretation too favorable to the established order of things. Perhaps nowhere were these assumptions more directly attacked than in the writings of J. A. Hobson. In his *Work and Wealth* he claimed that orthodox economics was animated by a too narrow and materialistic interest in the productive process. Against economic utilities must be set social costs, and against economic disutilities there may be social profits. From the standpoint of social economy the values of capitalistic production must be revalued. From this standpoint the fact that the marginal laborer receives his economic due, if it is a fact, is no final argument against an intervention which would raise his reward to a level of decent maintenance.

The intrusion of social considerations was effective also in the broadening out of the scope of economic inquiry. It gave a new interest to a subject like taxation which had hitherto received rather summary treatment. The change of viewpoint and the enrichment of the study are well illustrated by Seligman's works. The same trend is illustrated by the intensive studies of economic institutions and organizations such as were undertaken by the Webbs; by the investigations into social concomitants of industrial change such as those of Sombart, Tawney, Hobson and the Hammonds; and by the researches on the interdependence of economic and cultural phenomena such as the analysis which Max Weber was preparing on the relation of religion and economics.

Of all the economists who revealed this new sociological trend none was more outstanding than Thorstein Veblen. His incisiveness, his irony, his critical reversal of accepted premises, and above all his consistent interpretation of economic and social institutions in terms of technological change, gave his work a peculiar significance. While seemingly aloof from contemporary schools of thought, he formulated, perhaps more profoundly on that account, certain dominant tendencies of the age, and in particular its preoccupation with the mechanical and materialistic aspects of existence. He criticized the prevalent theories in the light of the *Zeitgeist*, and built up a positive doctrine that was certainly, in spirit if not in manner, in harmony with the deterministic evolutionary science of the time. The fact that Veblen influenced so profoundly many of the younger economists and sociologists shows how fully his teaching incorporated, not the traditions, but the working hypotheses, of the period.

To understand Veblen's position in economics, it is necessary to recall his sociological doctrine. To him the great agencies of social change are those which establish new modes of habituation, of "use and wont." These agencies in the last resort are the techniques imposed by the devices which men discover in their efforts to satisfy their primary needs. When the technique changes, the society gradually changes in conformity. In the feudal age the system of production was one of "trained man-power organized on a plan of subordination of man to man." This system expressed itself in the highly personal character of government, in the authoritative and hierarchical character of religion, in the estimation of craftsmanship and personal

dexterity, and so forth. But the industrial age brought new techniques, those demanded by the machine, and again society is transformed, not only in its economic aspects, but in its political institutions and its cultural standards. The new technology destroys the old ideals as well as the old customs. In those spheres which are most remote from the new influences, the old traditions, as of militarism and nationalism, are hardest to dislodge, but they fight a losing battle. The ancient virtues of "patriotic animosity and national jealousy" are close beset by the influences emanating from international dependence and the mechanization of warfare, not to speak of the generally skeptical frame of mind which the machine age induces. Veblen in his numerous works cited instance after instance to illustrate his thesis that the peculiar habits of thought of each age, those which give social relationships their form and character, can be traced back to the peculiar discipline of life which depends upon its technique.

Such a theory was assuredly in consonance with the conditions of the early twentieth century. Its distinguishing feature was not the growth of capitalism but that great advance of mechanization which included capitalism as one of its aspects. That advance had been peculiarly rapid on the North American continent and it was appropriate that the thinker who most emphatically proclaimed its sociological significance should have done so in the United States. The viewpoint of Veblen was in any event clearly related to the pragmatic philosophy becoming dominant in the country.

The application to economics took the form of a general analysis of institutions, critical of the older theories, and descriptive, in a curious style of hard realism, of the working of the economic order in terms of the doctrine just outlined. In its critical aspect it was a challenge that effectively disturbed the older norms of interpretation while it offered a new illumination of the nature of capitalism, of the distinction between pecuniary and industrial motives, of the character of business enterprise, of the significance of a leisure class and of vested interests. Doubtless the economics of Veblen is exposed to criticism on the ground that it is entirely the *exposé* of a point of view lacking in catholicity and narrowed by the ironical temper of a scientifically disguised opponent of the status quo. But no one can deny either the power of the challenge or the keenness of the analysis.

Veblen had given a new meaning to the

"materialistic interpretation of history." The special Marxian formula, which found the root of social change in the relationship between the owner and the producer, had proved too narrow, too dogmatic. The simplicity of the strict Marxian determinism was being abandoned, on historical and psychological grounds alike, although, as Seligman's study showed, the importance of the economic factor as a determinant was being more fully admitted and realized.

A final word may be said regarding the cleavage of individualist and socialist economics during the period. In Europe the number of economists who might be classified as socialists had been increasing, but that term covered an ever wider variety of attitudes. The left wing parties were interested largely in economic ideology, and while the adherents of the Marxist doctrine, orthodox or revised, still held their ground, elsewhere there was a search for a new ideology, of which the chief result was the syndicalist "myth" as expounded by Sorel and Labriola. On the other hand the right wing socialists were less concerned with general theories, and their intellectual leaders were more successful in stimulating the advance of those researches into poverty, unemployment, trade unionism and allied subjects with which the name of the Webbs was already so notably associated. At this end the line between socialists and individualists was losing its sharpness. In England, for example, some of the Fabians, such as Graham Wallas, were socialists under one interpretation of the term and individualists under another. In France the doctrine of co-operative solidarity advocated by Gide, looking toward control over production by associated consumers, was quite distinct from the socialism of the Catholic school, and the latter was far apart from the tenets of the Marxists or of the syndicalists. In truth socialism—and individualism too—had grown protean, a fact which happily was making it more possible to separate the business of scientific interpretation of facts from the no less legitimate but entirely different business of ethical evaluation.

IV. POLITICAL SCIENCE. Toward the close of the nineteenth century there were signs of a very significant change in political science. There was a beginning of that most fruitful experience without which the really great advances in any science never take place, the re-examination of first principles. It may, in a longer retrospect than we possess, seem curious

that the absolutist doctrine of sovereignty, one, indivisible, omnicompetent, should have endured so long in the face of the separation of church and state, of the triumph of federalism in North America, of the obvious limitations of parliamentary control, and of the confusion and even terror which the practical assertion of that doctrine caused within a civilization inexorably bound by commerce and by culture. As the century closed, various lines of attack on that doctrine were converging, and the twentieth century witnessed the united assault which could not stay the catastrophic fulfilment of the menace inherent in the unlimited state.

Among the considerations which were leading to a reinterpretation of the doctrine of sovereignty none was more potent than the recognition of the role played by great non-political associations, associations which the state claimed to regulate but which it could no longer claim to be merely its creations. The meaning of the separation of church and state was interpreted anew by writers like Figgis, who in his *Churches in the Modern State* distinguished the autonomy of the church in its own sphere from that of the state. But it was the contemplation of the great associations of the economic order which more generally inspired the attack on absolutist sovereignty. "If we look at the facts," wrote A. D. Lindsay in 1914, "it is clear enough that the theory of the sovereign state has broken down." The facts in question included the loyalties evoked and the powers exercised by the corporate groups or voluntary associations within the community, associations that, like those of capital and labor, entered into conflicts on which the state seemed unable to impose its will, while at the same time they united their members in unions that extended beyond the confines of any state. Above all, economic power refused to be the mere subject of political power, and there were salient occasions when it openly or tacitly defied the sovereignty of the state.

These facts found an extreme interpretation in the political theory of syndicalism. Extreme as it was, nevertheless it remains significant of a new attitude toward the state. Conditions had indeed changed when in the early twentieth century the French exponents of this doctrine, Sorel, Louis, Pataud, Pouget and the rest, could regard the state, with whatever exaggeration, as an outworn and rather needless organ, to be supplanted by economic syndicates. It was the farthest reach of the movement of protest against sovereign claims that seemed no longer

realistic. It made the rising doctrines of the guild socialists seem moderate. The latter, like Penty and S. G. Hobson, would merely limit the state's sphere on the ground that the business of economic production was already controlled by other forces and could be far more satisfactorily administered by functional or occupational organizations, the reconstructed guilds or "parliaments" of producers.

The alleged economic impotence of the state was also made the basis for assaults on its sovereign independence in international affairs. It was effectively expounded by Norman Angell in his *Great Illusion*, which showed the economic futility of the last resort of sovereign power—war. It was brilliantly illustrated by H. N. Brailsford, who in his *War of Steel and Gold* exposed the powers of world finance moving behind the curtain of diplomacy. The same argument was naturally adopted by the socialists everywhere, Oppenheimer and Loria being important exponents of it. The Marxists, it should be observed, made it the ground for a reconstituted state rather than for a limitation of state powers.

A more conservative reenforcement of the attack on the older sovereignty came from the jurists who were revolting from the standard of Austin. Jellinek brought out some of the limitations to which state power was subject because of its legal (*rechtlich*) character, though he still thought of constitutional guarantees as the self-imposed limitations of the state. The Dutch writer Krabbe went further. He set the old idea of the state as a power system, with sovereignty inherent in it, over against what he regards as the modern idea, according to which government is conceived as an organ of society for lawmaking. This latter conception makes government an agent only, subject to the law which it enacts or administers, the real sovereignty being that which is inherent in law itself, which derives from the loyalty to the code. To Krabbe it is not in the last resort the will of government or the will of the majority which has authority. It is law itself, an impersonal spiritual (*geistig*) power whose regulations express the social valuations of the community, in so far as these can be formulated and confirmed through legislation. The basis of sovereignty broadens as the state moves towards democracy, but the limits of sovereignty become more apparent, since in major concerns the law can regulate only in so far as a definite social valuation, capable of legal statement, is expressed.

The followers of Maitland and Gierke applied the juristic doctrine in another direction. To them the state was a corporate "personality" distinguished from others as the organ of law-making and law enforcing, deriving its character from the juridical principles of which it is the author and interpreter. This doctrine admits two facts essential to any realistic theory of the modern state, the first being that the state is not identical with the community of which it is an organ, and the second that the other corporate groups in the community have likewise a function and a sphere which in some ways limit the function and the sphere of the state. Just what is, no less than what should be, the relation between them, became the crucial problem of modern political science. While some authors like Dicey admitted limitations on sovereignty in practise without really abandoning the older theory, others made these practical limits the basis of more radical interpretations. The principle that the state was a source and sanction of social order was called in question. Some, like Duguit, sought another ground of unity altogether, finding it in the "social solidarity" of men, a diffused sense of interdependence which supported the various forms of rights and obligations accepted in a community. Others, extending the federalist idea from territorial to associational groups, sought for a working equilibrium of powers in which no one could be called supreme in all things over the rest. To others the very postulate of unity, of which the state had been hitherto regarded as the main bulwark, was no longer admissible, and thus the way was prepared for those pluralistic theories which, in keeping with the anti-intellectualistic trend of the age, were making headway as our period approached its close.

Reviewing the period as a whole, we recognize the vitality of political thinking, critical and constructive, which pervaded it. It was characterized by significant and fruitful efforts to break away from traditional interpretations of the state and to formulate in theory the results of the accumulated political changes of an era. It is true that political science was undergoing the general changes characteristic of social science throughout the period. The realistic study of political phenomena, aided by the new interest in psychology, gave us works like Michels' *Political Parties* and Ostrogorsky's *Democracy and the Organization of Political Parties*. The development of social legislation, anti-trust legislation and so forth, led to numerous researches,

practical and speculative, on the economic activities of the state. The comparative and historical study of political institutions was advanced. But besides the industry of research there was the questioning of old hypotheses, the endeavor to see the state itself in the light of a new time. This more speculative aspect was far less in evidence in America than in Europe. But it was the aspect which gave its historical character and its profounder interest to the political science of the period. And if in an age of practical concerns, looking askance on speculation, some justification was needed for this engrossment in first principles, it came with a vengeance when the World War revealed to those who had eyes to see the scarcely imaginable consequences of the enthronement of doctrines which only the blindness of tradition could have imposed on an alien age.

V. JURISPRUDENCE. Perhaps no division of the social sciences retained so tenaciously a formalistic attitude toward its subject matter as did jurisprudence. Not only did it stand relatively aloof from the developments in the other social sciences; it seemed also to be little influenced by the ferment of thought concerning the state, even though it was itself an essential part of any *Staatslehre*. It is true that in the later part of the nineteenth century the philosophical bases of legal formalism were undermined by those jurists who, like Maine and the writers of the continental historical schools, drew attention to the preconditions and origins of modern codes or, like Ihering, sought to interpret law in terms of social aims and social adjustments. It is true also that the significance for law of the new multiplicity of associations, of "corporate persons," was brilliantly expounded by Gierke and his followers. But these interpretations scarcely penetrated the law schools or the law texts, nor were they effectively applied to the actual problems of substantial law. In England and America the analytical school of Austin, enclosed within the rigid walls of an absolutist doctrine of sovereignty, still dominated legal thought.

The early years of the twentieth century mark a fairly definite change. It became more apparent that analytical formulae were inadequate to explain the judicial process; that, for example, the decisions of courts were not conclusions drawn with inevitable logic from the major premise of the law and the minor premise of the case "subsumed" under it; that the law was not

a rubric the interpretation of which remained clear and unshaken by the currents of the age and the social valuations of the judge; that in fact its most important categories, like "freedom of contract" and "due process," were highly elastic and uncertain, not to be defined *in abstracto* but only in their concrete application to perplexing social situations wherein other legal categories might also claim to direct the decision of the court. It became apparent that the categories themselves were not so self-sufficient as they had seemed to the lawyer who regarded them as the explicit "commands" of the sovereign, and that the code as interpreted by the courts was a far more subtle and accommodating reality than the code as enacted by the government. It became apparent that even so the law of the court lagged behind the march of social requirements. And if this were true of municipal law it was true in a more tragic manner of that body of rules, not properly to be dignified with the name of law, which stretched over the no-man's-land between national frontiers.

In the consciousness of these defects, alike in the theory and in the form of law, new schools of jurisprudence took their rise. It was inevitable that in their efforts to reform the science of the law they should at length have felt the impact of the other social sciences, the recognition of which was already producing results in other fields.

The new attitude was well expressed by Ehrlich in his conception of the "living law." The law lived as it worked on the purposes of men, as it affected their social relations, as it concretely operated within the frontiers of a people. It lived as it revealed itself in judicial interpretation, in the outlook of the judge, which, perhaps, as Wurzel and Bozi endeavored to show, could be made to reveal the very spirit of jurisprudence. Obviously this tendency brought jurisprudence under the influence of the disturbing relativity of psychological inquiry.

Nor did the new schools content themselves with a broader, more humanized interpretation of the juristic facts, including the juristic "mind"; attacking the absoluteness of the legal formula they attacked also the absoluteness of that conception of "right" or of "justice" or of "natural law" or of "equity" which jurists of all times had postulated as the ethical foundation of law. The end or object of law came to be viewed as relative to the social needs, interests

or demands of the age. Stammler and Kohler prepared the way by emphasizing the idea that law was the product of social conditions in the past, laggingly adjusted to the social ideals of the present. This adjustment was achieved in part by changes in the code but in great part by judicial reinterpretation, in the light of the civilization of the present, of the major principles of the existing code. It was not enough, in applying the law, to go back to the conditions of its original formulation and to the motives of past legislators and constitution makers, still less to rest judicial determination on a logical analysis of the ancient letter of the code.

Here obviously was an outlook which, while open to critical attack on the ground that it weakened the necessary fabric of the law by making it depend on the variable and perhaps arbitrary conception of social trends and interests entertained by individual judges, nevertheless gave to law a more realistic function and a greater social responsibility. It brought into clearer light what the courts were actually, often in a fumbling, semi-conscious manner, attempting to do. It created a demand for a more explicit statement of the principle underlying this practise, and various theories were born as to the manner in which the law seeks to envisage the conflict of claims and interests, responsibilities and rights, which arise out of the changing social circumstances of the age. Above all it gave an impetus to the study of legal reform as a proper concern of the jurist. A new interest arose in the potentialities of law as a social agency; in the juridical tasks of governmental boards, seemingly executive in character; in the application of law to meet the always divergent situations of individual conduct; and at length in the problems of preventive justice.

In this development certain American jurists took an important part. The leader of the movement was Roscoe Pound, who in 1911 had proclaimed "the need for a sociological jurisprudence," and had already begun that series of eminent contributions which found the reality of law in its expression of the conditions, modes of thought and moral attitudes of the age. Within the range of these the law was "alive," within these limits it won the authority and obedience which in fact alone entitled it to the name of law. Nowhere has the pragmatic tendency of American thinking been applied more effectively than by Pound in the interpretation, and by Mr. Justice Holmes in the direct application, of a "living law."

VI. SOCIOLOGY. The period of early and rapid growth already past, sociology in the United States was encountering at the beginning of the twentieth century some new and serious problems. It was feeling strongly the impact of other expanding social sciences, particularly psychology and anthropology. The dominance of the "psychological approach" was manifested in the writings of various sociologists, such as Ellwood and Ross. Attention was directed to the study of the social attitudes, social responses, social "patterns" of the individual, and this study, while it enriched the materials on which sociologists were at work, introduced also a degree of hesitation and even of confusion respecting the actual sphere of sociology. It was curiously easy to pass from the standpoint of the sociologist, with his interest in social relationships, to that of the psychologist, whose interest lay rather in the individuals so related. The psychological phenomena, the attitudes and reactions of individuals, their social relationships, are the conditions of the sociological phenomena and as such of vital significance to the sociologist, but they are not themselves the peculiar phenomena which constitute this field. There still remains the study of social relationships themselves, the institutions and organizations of society.

The impact of anthropology had also a disturbing as well as an enriching effect. Anthropology had developed the concept of the culture stage and the culture area. It included in the concept of culture the whole array of practises, techniques, habits, arts and crafts, beliefs, ideas characteristic of the group under consideration. Sociologists tended to regard sociology as equally comprehensive and thus were in danger of losing the focus of their proper study, that of the social system within which and through which these cultural phenomena were manifested. The admirable work of Sumner in his *Folkways* was nevertheless more valuable as descriptive anthropological material than as a systematic contribution to the "science of society." The work of W. I. Thomas, another distinctive pioneer in his own field, was chiefly concerned with the psychological reactions of individuals of particular types within particular social situations.

In America comparatively little attention was devoted during this period to the fundamental problems of general sociology. The pragmatic tendency which was now characterizing American thought, nourished in this field by a grow-

ing revulsion from the too easy generalizations of the period of Ward, was not propitious to the formulations of first principles. Apart from Veblen, who stood by himself and whose signal contribution has already been indicated, the most noticeable workers in this field were Baldwin and Cooley. They both revealed, though from different angles, the profundity of the relation between the personality of the individual and the social milieu. Cooley in addition brought out the significance of the small group, the face-to-face group, as a socializing agency. His two books, *Human Nature and the Social Order* (1902) and *Social Organization* (1909), retained, more than those of any other writer who appeared within this period, the distinctive quality of sociological investigation. For Cooley the group with its institutions was a primary datum, not to be resolved into the attitudes of the individuals who compose it. Its structure as a group, its influence on its members, the way in which the group itself changed or developed as its members changed or developed—these phenomena, the essential sociological phenomena, were to him of primary importance.

In England during our period the specific study of sociology was almost confined to a small group associated with the University of London. At this center a sociological society was formed, with the *Sociological Review* as its organ. The leading members of the group were Hobhouse, Wallas and Westermarck, although the work of the last mentioned belonged more nearly to anthropology. Hobhouse was the most prolific writer of the group, but many of his contributions belonged rather to the fields of ethics and politics and nearly all of them might be classed under the rubric of social philosophy. He was particularly interested in applying the evolutionary principle to society, tending to regard the process of social evolution as revealing the gradual realization of those liberalistic ideals of which he was a persuasive and broad-minded advocate. He was apt in consequence to identify social evolution with social progress. The more "evolved" society was that in which there was greater "mutuality of service," a wider cooperative harmony, greater control of mind over environment, and a greater liberation of human purposes within the order of society itself. To him sociology was a "vitalizing principle" of synthetic social interpretation. Hobhouse employed this principle with much insight, although his treatment remained exposed

to the criticism that it rested on certain assumptions regarding the rationality of human nature and that it selected from the conflicting variety of social phenomena those which were in accord with his initial hypothesis. The only way to meet this criticism was by a comprehensive analysis of the social characteristics exhibited by groups representing, according to some objective criteria, "higher" and "lower" stages of social evolution. Realizing the significance of this alternative method of approach, Hobhouse cooperated at the close of our period with Wheeler and Ginsberg in a descriptive and statistical survey, the results of which were published in the volume entitled *The Material Culture and Social Institutions of the Simpler Peoples*. The contrast between the two modes of approach is illuminating. The descriptive analysis of the latter work brought out the lack of any simple correlation between the "higher" social stage and the nearer realization of those ideals which were summed up for Hobhouse in the concept of social progress. It showed the necessity for distinguishing what Hobhouse did not always adequately distinguish, two equally legitimate but by no means identical objects of social research, that which is concerned with the factual direction of social change and that which seeks to trace the mode and the degree in which changing social forms reveal or embody some type of social ideal.

The work of his colleague Graham Wallas followed in some respects an opposite trend from that of Hobhouse. Wallas was no system-builder. A sympathetic and keen observer, he was always seeking for principles on which to build a science of society, but his success lay rather in his suggestive interpretations of this or that aspect of the changing scene. He was much influenced by the psychological theories of the age, and his first important work, *Human Nature in Politics*, had for its theme the non-rational motivation of human conduct in the working of democratic institutions. It was significant that his work was contemporaneous with McDougall's *Social Psychology*, a very influential volume which presented in systematic fashion psychological premises for the most part in harmony with Wallas' conclusions. But Wallas did not rest satisfied with his earlier exposition, and in his next work, *The Great Society*, he dealt with the organization of a complex modern society as a problem set for the human intelligence in its quest for social welfare. This more constructive study was signifi-

cant, apart from its shrewd appreciations of particular social situations, chiefly as presenting in a convincing and felicitous manner the problem of the adjustment of the social system to the primary needs of human nature.

Sociology in France had been following distinctive lines. While the influence of Comte may still be traced in the Durkheim school, an opposite tendency, that expressed in the regional studies of the Le Play school, had gained ground. This tendency continued into the twentieth century. One outgrowth from it was the branch of study known as "human geography," of which the chief exponents were Brunhes and Vidal de la Blache. These writers envisaged larger areas than did Demolins and the school of *la science sociale*, and were especially concerned with the interaction between geography and social activity. From this point of view they may be classed as sociologists rather than geographers, since geography provided rather the mode of approach than the object of interest. It was chiefly another method of grouping and studying the complicated array of social phenomena whose wealth of forms and interactions is at once the incentive and the despair of the sociologist.

The interaction of psychology and sociology, so characteristic everywhere of this age, took a peculiar form in France. There a group of writers associated with the periodical *L'Année sociologique* carried to its logical conclusions the old notion of a "group consciousness" or "group mind" which in some way has a reality other than that of the individual mind. In order to establish this notion they resorted to the phenomena of primitive society. Primitive religion, for example, is a set of "collective representations"—which means that it expresses the ideas that spring from the emotionally charged contacts of the members of a group. Its character, in other words, is not to be understood from the standpoint of the psychology of the individual. It reveals the mentality which social beings possess because they are socialized, because they participate in common situations. We begin with collective ideas—they are the stuff of primitive thought—and at length attain individual ideas, as in the thinking of civilized man. The exponents of this principle, Durkheim, Lévy-Bruhl, Hubert and Mauss, differed in one important respect from such advocates of the "group mind" as the Hegelian mystics, for example, Bosanquet, or the nationalistic psychologists of the McDougall school. For Durkheim

and his followers regarded the group consciousness as a primitive mode of thinking which civilized man had in part outgrown, whereas the latter made the "group mind" the higher, more enduring reality. But in either form the doctrine of the "group mind" has been vigorously challenged.

It would unduly extend this survey to include the sociological movements in other countries, such as Russia and Italy, where nevertheless considerable activity was shown. But in conclusion something must be said of the highly significant developments which were taking place in Germany. Here the question of fundamental method, as distinct from exploratory technique, was specially prominent. Was sociology, for example, a special science dealing with an aspect of social life or was it a general science of society corresponding to biology in the organic sphere? Simmel had sought to delimit its field to the abstract forms of interaction or relationship, though his own remarkable *Soziologie* transcended his theoretical limits. He had held that social forms, such as subordination and superiority, could be studied apart from the different media, economic, political, religious and so forth, through which they were manifested. Against this view there arose a considerable volume of protest, expressed by Spann, Wundt, Oppenheimer and others. On the other hand there were various thinkers who were stimulated by Simmel and recognized the cogency of the contention underlying his exposition. They felt that society as such was a challenging object of study but that in order to advance the study it was necessary to distinguish the essential or peculiar or universal attributes involved in social relationships and conduct. In this respect German sociologists as a whole presented an interesting contrast to American sociologists. The latter were inclined to invade the vast new territory without much concern over strategy, trusting to the tactics of the behavioristic and the statistical technique, whereas the former premeditated much and long over the best method of occupying the land.

The resulting *Methodenstreit* was no mere logomachy. If sociology was a real science, it was important to discover its sphere. Many representatives of the special social sciences, like Troeltsch and Vierkandt and Oppenheimer, were crossing these accepted boundaries and becoming sociologists as well. It seemed incumbent upon them to define their new posi-

tion. This task made a special appeal to the speculative scholarship of Germany. Besides, if, as writers like Heinrich Rickert asserted, there was a great distinction between the sciences of nature and the sciences of "the spirit" (*Geisteswissenschaften*), that might certainly involve differences in their respective approach and method which were well worth looking into. The various doctrines which resulted were often no doubt too extreme in opposite directions. But the respective claims of the "scientific" and the "historical" schools certainly made the problem clear, and the challenge which each gave to the other was productive of genuine results. These results, however, were scarcely manifest until a later period, when the main works of Vierkandt, von Wiese, Oppenheimer and Max Weber appeared.

VII. ANTHROPOLOGY. Anthropology, like sociology, has been faced with the task of finding its place in the realm of sciences. From the first it straddled the fences distinguishing the "natural" from the social sciences. In its biometric and ethnological researches it entered into the regions of physiology and anatomy and the wider spaces of biology; in its cultural researches it included all the phenomena expressive of human mentality, such as art, language, religion, social organization, technique. In fact its subject matter was marked out for it not as a definite content but as the whole complex of human phenomena wherever this complex was not too elaborate and diversified to admit of some unity of treatment. If civilized man with all his multifarious works resisted such treatment, at least primitive man seemed to present a more manageable problem. Besides, the principle of evolution offered a key which was eagerly grasped by the pioneers, such as Spencer and Tylor. Social groups by its aid could be classified according to cultural stages, and all the variety of phenomena they displayed could thus be reduced to some kind of order.

What the anthropology of the early twentieth century did was to overthrow the simplicity of these categories, to show the disturbing heterogeneity of primitive society and the difficulty of applying any universal stage-formula that would fit the facts, to seek for new concepts in terms of which complexes of human phenomena could be grouped, and to essay new methods which would express the relation of one complex to another. The richer materials of anthropological investigation provided by the scientific

observations of many more or less primitive peoples, from the Australians to the Eskimos, from the Melanesians to the American Indians, undermined certain of the evolutionary assumptions of earlier anthropologists. Wundt had already, in his *Folk-Psychology*, laid stress on the accidental, irrational, seemingly arbitrary origins of the endlessly variant customs and myths of primitive peoples. He had discovered in the emotionally charged atmosphere of group association the primary conditions of cultural expression. The anti-intellectualist reaction now found a peculiarly congenial field in anthropology, partly because the attitudes and beliefs of the "savage" presented an array of contradictory and apparently irrational fantasies which the civilized investigator could regard with critical objectivity, partly also because the confidence displayed by the anthropological pioneers in simple schematic constructions of human evolution was confounded by the amazing variety of anthropological fact.

An extreme development of the new tendency was exhibited by the French school of Durkheim and Lévy-Bruhl. The former in his work on *The Elementary Forms of the Religious Life* and the latter in his two books on primitive mentality insisted on the "pre-logical" character of every man. Primitive ideas and social observances arose, according to them, out of the mystical uncriticized impression which the forces of nature made upon primitive man. Above all, these ideas were the results not of individual reflection but of the contagious influence of the group as it worked upon suggestible minds that cared nothing for the laws of logic. The savage, according to Lévy-Bruhl, construed experience in accordance with an illogical "law of participation," while the civilized man accepted the logical "law of contradiction." Durkheim and Lévy-Bruhl were criticized as drawing too sharp a distinction between primitive and civilized thought. But much of the criticism was based on the argument that the irrationality imputed by them to the savage is also characteristic of mankind even in the heyday of science. What men took for reasoning was more often "rationalization," and the illustrations of it which Boas, for example, presented in his *Mind of Primitive Man* seemed near enough akin to the ways of civilization even before the Great War afforded its profoundly impressive object lessons.

Some anthropologists, denying the existence of sheer distinctions of mentality between the

primitive and the civilized, went so far as to deride the principle of evolution altogether. Thus Goldenweiser, in his *Early Civilization*, spoke as if evolutionism in anthropology were entirely discounted, although it was Darwinism that first gave anthropology its inspiration and almost its *raison d'être*. Others attacked the evolutionist hypothesis at particular points. Westermarck criticized the evolutionary schema which represented man as passing from promiscuity to monogamy by maintaining that monogamy was primordial in the human race, though his evidences, as Briffault showed much later, were themselves far from satisfactory. But in this period the outstanding critic of the whole principle of cultural evolution was Graebner. He substituted for it the theory of "diffusionism," of which he was the unrestrained advocate.

To Graebner cultural resemblances were mainly the results of contact and adoption. He sought to trace the lines or waves of diffusion by an elaborate study of the material items of culture. (It is worth while noting that it was also in terms of the material culture that contemporary writers who retained the evolutionary hypothesis, like Müller-Lyer, built up their system of culture stages.) Graebner discovered a vast network of diffusion transcending the limits of island and continent, and worked out, with supreme faith in the universality of his principle, great circles and layers of culture. This doctrine was accepted by the English anthropologists Elliot Smith and Perry, who regarded culture as radiating from one center and were not deterred by the paucity of evidence from the sweeping conjectures as to the mode and character of this supposititious process.

Rivers, an anthropologist of great promise, adopted the diffusionist principle with more caution, particularly in his remarkable *History of Melanesian Society*. He was acutely aware of the difficulties of interpretation and of the complexity of the conditions under which culture accumulates and changes. He realized, as Graebner failed to do, the psychological preparation requisite before an item of culture, especially a non-material item such as social organization, can be successfully "borrowed." He recognized also that "borrowing" may change the character of the adopted item. But he came nevertheless to the conclusion that contact is the spring of the human progress in which he definitely believed. In his application of this principle he showed great ingenuity, and he

certainly exposed himself less than the other members of his school to the general criticism which was brought against them, namely that, apart from their too easy acceptance of conjectural adoptions and borrowings, they conceived of culture too much as a series of discrete items, and failed to appreciate the integrity of a culture which, resultant as it is of many factors, yet expresses the psychological solidarity of the group.

While the controversy over diffusionism raged, the study of anthropology was being advanced by numerous specific researches. For this work the United States offered unusually favorable conditions because of the presence within it of Indian tribes whose primitive character was not yet wholly submerged by the advance of civilization. It was therefore appropriate that a leader in anthropology should have arisen and founded a school in America. That leader was Franz Boas. It is significant also that his school should be characterized by a principle of method rather than by one of interpretation. In effect Boas took the following position: Let us make no postulate of evolutionism or of diffusionism or of environmentalism, but let us use any one of those concepts wherever it best fits the facts. Let us begin with definite geographical areas within which a type of culture predominates, such as that of the Kwakiutl. Let us intimately investigate the totality of cultural factors within it, seeking the historical processes of which they are the resultant, seeking also the psychological unity on which they no less depend. The different factors will be variously exhibited, variously related, from tribe to tribe, and thus will lead to a comparative study of cultural aspects, of the mode of assimilation of common features and of the significance of differences. We thus discover the conditions and limits of the culture area, and give concreteness to the idea of a culture pattern in each case, which incorporates and modifies to its own likeness the accretions, introductions and novelties accepted from without or rising from within. The culture area will then be seen as a whole in its geographical setting and in its relation to other areas.

This was the working principle which guided the series of notable researches conducted by Boas and by the representatives of his school, such as Wissler, Goldenweiser and Lowie. It stimulated the exploration of many aspects of primitive custom, ceremonial and myth among the Indian tribes. It encouraged the study alike of single items and of complexes of culture, with

the aid of linguistic and other direct modes of approach. As a historical school no doubt it revealed the limitations of the "historical method," as these were revealed also in economics and other sciences. For a science is never content with working principles; it seeks also synthetic principles interpretative of the phenomena which it examines. From the latter the historical school shrinks, and therefore it can never hold the field alone. If old generalizations prove inadequate, nothing is more assured than that the synthetic spirit of science will seek for new ones.

VIII. HISTORY. It was an old established convention that when an author set down the record of change in the economic order he was accounted an economist, when he traced changes in religious or philosophical thought he was a theologian or philosopher, but when his main theme was the record of political change he was *par excellence* a historian. Certain assumptions underlay this distinction which, long before attacked by writers like Voltaire, began to be vigorously challenged in the later nineteenth century. Why should the record of dynasties and of constitutions be regarded as supremely historical? Did not such an attribution assume an unwarranted causal priority of the political event, if indeed history was the study of those changes which most affected the life of man and ushered in the present order of things? Did not these political changes depend upon social and economic changes in such wise that, abstracted from these, their origin and significance were misinterpreted? The machine age was teaching its lessons. It was defeating not only the "great man" theory of history, not only the individualistic interpretation of political transformations, but the whole doctrine of the preeminence of politician and diplomat and military general and constitution maker in determining the destinies of mankind. "History," said the scientist Fabre, "celebrates the battlefields whereon we meet our death, but scorns to speak of the plowed fields whereby we thrive. It knows the names of the king's bastards, but cannot tell us the origin of wheat. That is the way of human folly."

All the social sciences, as well as those natural sciences whose applications most directly affected human life, were pressing home the lesson. Geology and archaeology were vastly extending the time span of history. Anthropology was revealing the significance of culture changes. Geography was showing the dependence of

civilization on the territorial environment. Psychology was demanding that historical interest be directed to the process of collective thought, the mass movements of opinion as revealed in custom and tradition. Economics and technology were claiming that behind the changes of social usage and institution lay as prime movers changes in mode of production and in control over nature. Under the manifold impact of these influences the traditional conception of history seemed no longer tenable. It was no longer enough, for those who claimed to tell some portion of the story of mankind, to add to an overwhelmingly political account a perfunctory chapter or two on scientific or economic developments. If for no other reason, the idea of the economic interpretation of history had bitten too deeply into the consciousness of those who had witnessed the social transformations of the industrial revolution.

The resulting controversy on the nature of history was carried over into the twentieth century. It raged particularly in Germany where Lamprecht was the protagonist of the view that in proper perspective history was culture history, that the essential changes were not those which occurred in the political structure or were engineered "from above" by governments, but those which occurred in the ideas and modes of living of the people. In this position Lamprecht found able supporters such as Gothein; but his own *German History* was sharply criticized both by the state historians who disputed his theory and by the specialists who challenged his competence. Lamprecht's best known answer was that offered in his series of lectures delivered in 1904 in the United States and published under the title *What is History?* In this volume his insistence on the new historical point of view was more important than his own exhibition of its results, for in seeking to show the necessity for the comprehensive study of all aspects of life he was led to make doubtful generalizations regarding the psychical manifestations of successive periods. Nevertheless the work of Lamprecht was both fruitful and influential. He insisted that history be more than a description of events, that it must be an explanation of change. He insisted that history is a unity and that the unity of history derives from the unity of society, responding through its institutions and varied modes of expression to the manifold interdependent conditions under which it lives in every age.

The work of Lamprecht was very timely. The

defects of his own work showed how difficult was the task which he imposed on the historian. It involved him in the consideration of problems of social interactions which were beyond the generally accepted limits of historical study. It is true that Marx had already flung a challenge to the writer of history; but Marx had also formulated a simple dogmatic solution which the orthodox historian had generally rejected. Lamprecht offered no such "key" to history. He raised a problem rather than solved it. How should the historian achieve this unified picture of civilization which Lamprecht proclaimed the great desideratum? And how should he deal with the problems of social causality when he limited himself to his old task of political historiography or to any of the special histories which he might seek to present? Was description—*wie es eigentlich gewesen sei*—the allotted task of the special historian, and explanation—*wie es eigentlich geworden sei*—the business of the comprehensive historian of culture?

The problem of historiography brought forth the comprehensive survey by Gooch entitled *History and Historians of the Nineteenth Century*. While this volume offered no definite program it showed the trend toward a more comprehensive view of the content of history. It showed also the necessity for the cooperation, in the production of a true picture of the course of civilization, of the specialists of various nations in the various departments of historical study. Finally it suggested that in the search for historical truth there was involved a profounder quest than that which arrived at new or more accurate facts, namely the quest for laws expressive of the direction which, beyond the multiplicity of events, the drama of human affairs might be shown to reveal.

Gooch had complained that the philosophy of history was not keeping step with the advance of historical research. While Lamprecht was insisting on the principle of *Kulturgeschichte* he had not adequately realized the problem of appraisal and of method which it involved. Of the few writers who tackled this problem none did so with more insight than F. J. Teggart, who was particularly conscious of the historical process through which our modes of interpretation themselves develop.

The broader concept of history found a number of strong advocates and exponents, among whom may be mentioned specially Seignobos, Pollard and Shotwell. It was popularized by Robinson and Barnes in the United

States and by Marvin in England. Other writers, such as Beard, contributed to the new synthesis by emphasizing neglected factors. No author was more influential in this regard than Robinson, who in *The New History* and other works dealt freshly and vigorously with the older traditions of history writing, insisting that history must seek to interpret all that we know or can learn about the past of mankind and that beyond events there lie causes which the historian cannot neglect without peril to his claim as scholar or scientist. Such claims were fortified by the numerous studies of various aspects of the human record which were appearing in many lands. It is not possible in this brief survey to mention these fruitful contributions. Suffice it to say that they ranged from Eduard Meyer's great *History of Antiquity* to Merz's *History of European Thought in the Nineteenth Century*.

In conclusion it may be observed that all these movements were bringing history into new relations of interdependence with the other social sciences. The historian no longer had a field of knowledge fenced off as his own. He was dealing with the materials provided by anthropology and economics and geography and all the rest. What remained distinctive in his task was the mode of approach, the aspect from which he treated them, and the form of the synthesis into which he brought them. The historian was discovering the same lesson which the psychologist and the economist and the sociologist were also learning, that in the closely interwoven texture of social life social science has its province demarcated not by frontiers set up by nature but only by the special objective with which it enters the common field. If from its own angle it contributes to the understanding of the life of man, that, and perhaps that alone, is its title to existence.

IX. CONCLUSION. The period which we have just passed under review differs in the retrospect from almost all other periods of intellectual activity because of its abrupt and epochal termination. The sudden diversion of energies to warfare on a gigantic scale inevitably made a profound impression. The optimistic regarded it as an apocalypse whence might arise a new heaven and a new earth, the pessimistic as the downfall of a civilization. Nevertheless its permanent influence on the intellectual life of the nations may well be exaggerated. Apart from its momentous though contradictory political results, as exhibited particularly in Russia, in

Germany and in Italy, it is doubtful whether it did more than temporarily interrupt the deeper processes of social change. Thus the same influences which before its onset were making for the fall of the birth rate, for the decline of dogmatic religion, for the dominance of finance over industry, for the spread of economic consolidations, for the growth of urbanization and the development of the mechanical basis of civilization, continued to act in full vigor in the post-war epoch. The conclusions of those who found the conditions of social change, not in violent convulsions, but in the gradual processes which give man new controls over nature, seemed to be justified by the event.

What had been most obviously changing during the epoch in which our period falls was the material basis of civilization. It was these changes which underlay the trend of the age

toward internationalism. It was the contemplation of these changes and their immediate results which inspired its social philosophies, and fostered its mechanistic interpretations in biology and psychology. Here was the source alike of its optimism and of its occasional pessimism. It gave support to the idea of continuous social progress moving together with the growth of control over nature. And it was from this that those thinkers reacted who saw in mechanism a tyrant and not a servant, who denounced the times as materialistic and unspiritual. *Man versank rettungslos im Stoffe*, said those who, like Lamprecht or Tagore or Tolstoy or Inge, sought for ideals in the past or deplored their absence in the present. Nevertheless it was no accident that the belief in the reality of progress was itself a characteristic of the age.

R. M. MACIVER

XII

War and Reorientation

I. INSTITUTIONAL AND INTELLECTUAL BACKGROUND. The war years were for the social sciences singularly barren in systematic ideas. There was neither time nor energy during the years of fighting for the continuance of the academic theorizing of the pre-war period. When every existing structure had been disrupted it seemed unavailing to continue the process of system building. The overwhelming nature of the disaster that had befallen civilization imposed a sense of futility upon the professional scholar. Only here and there one might be found who proceeded insouciantly with his demonstrations, like Archimedes drawing his circles in the sand during the sack of Syracuse.

The paralysis of effort in the direction of theory was balanced by a mighty energy diverted to the immediate purposes of the war. This "intellectual mobilization," however, with its regimentation of effort, smothered the individual expression which is necessary for creative thinking. There was, in effect, a widespread renunciation of intellectual independence. Since each party to the conflict set up as two contrasting political systems its own scheme of ideas and that of its opponents, the field of possible variation in individual opinion on any question was narrowed down to the right view and the wrong, and to take the latter was to be traitorous. Historians therefore became official propagandists and focused on the prevailing struggle their interpretation of the past; sociologists and philosophers adapted their theories to the compulsions of the moment; religious leaders rationalized their teachings; writers and painters harnessed their imaginations to the uses of persuasion.

This intellectual mobilization also conscripted social scientists into the administrative techniques of government, and here their efforts were at once more effective and eventually more significant for scholarship. Statisticians and economists were drawn freely into the fiscal and industrial services; political scientists were called on in administrative organization; psychologists, sociologists and social workers were

set to administer the problems of morale; jurists were assigned to smoothing out industrial friction. The administrative techniques which had been developed in the large business corporation, where effective action had to be combined with the representation of conflicting interests, were taken over in the business of war. Even in a country like the United States, where the rhetoric of democratic government was so compelling, the elected representatives of the people made way for the dollar-a-year businessmen and the corps of technical experts. In these activities social scientists had a chance to put whatever notions they had to the test of strenuous experience. There was scarcely a scholar who passed through these services who did not emerge, though a bit saddened perhaps, with an unaccustomed richness of realism added to his thinking.

He had been compelled in the course of his work to resolve ancient theoretical disputes in terms of imminent governmental policy, and to formulate techniques for transforming that policy into action. Which was a better method of financing war—loans or taxes? Should industry be confined to supplying the necessities of war and of the productive civil population or should business go on as usual? Should men in the essential industries be permitted to volunteer for military service or should they be required to remain at their civil posts? What measure of regulation was required to check the advance of war prices? The men making these decisions lived in a strikingly non-individualistic world, one where the crucial dichotomy was between the "essential" and the "non-essential," where everything superfluous was whittled away in the face of the primary needs and "priority" was accorded in terms of function rather than profit yield. In such a psychological setting it was not surprising that the theory and technique of the regulation of prices and qualities, of production and consumption, should undergo an unprecedented development. At the close of the war the public character of production in time of military emergency was universally recognized, but nowhere so clearly as

in the United States, supposedly the great stronghold of economic individualism.

The revolution in economic policy was only one of the adaptations made by the state to the unremitting demands of the military struggle. With both the Allies and the Central Powers the requirements of diplomatic strategy were to be found overriding established political traditions. Theories of political conduct were evolved which were sometimes deliberate posturings for effect and as often rationalizations of the position into which a nation had been hurried by the logic of events. Racial or linguistic nationalism, which had served the German Empire well in its formative period and which later fomented anarchy and war among the mixed peoples of the Balkans, had in Germany yielded ground long before the war to the doctrine of economic nationalism or rather supernationalism. The discarded theory was picked up by the Allies, in spite of the incongruities of their political structures, and under the propagandistic form of "the self-determination of peoples" served not only to animate the military or revolutionary efforts of Poland, Czechoslovakia, Yugoslavia, Rumania, but also to create unrest in Egypt, India and China. Again, the Allies, forced to contrive a bond of union and a plea for support, found it in resistance to the aggression of Germany. Military aggression, hitherto a policy within the permitted range of national initiative, became thereby a crime against the whole family of nations. To support this another premise was necessary—that of a collective international conscience. This rested necessarily on the postulate of international interdependence. There can be no doubt, however, that there was a reality in this conception. It was implicit in the war itself, which had drawn half the world directly into its prosecution and involved the rest of the world none the less fatally. The time honored distinction between neutral and belligerent was stripped of significance. War had become a world condition, and therewith the interdependence of nations an established fact.

The regimenting of the civil population to the necessities of warfare was a governmental problem of as pressing consequence as the revolutions in economic and political policy. Warfare on a world scale was not merely a matching of strictly military strengths; it was a confronting of every resource on both sides. Thus the long-standing distinction between the army and the civil population was blurred, since

the latter was now conceived as directly or indirectly an integral part of the general military organization. In consequence a host of military terms and adumbrating ideas were introduced into civil use. Of these by far the most important was "morale." In its original meaning the term had covered the unanalyzed complex of psychological factors that braced the rank and file of an army to the punishment of battle or the labors of prolonged marches or the miseries of a siege. In the World War it was extended first to munitions workers, then to industrial workers at large, and ultimately to the entire population. As in the army it had long been recognized that morale depends to a large extent on material conditions, such as abundant rations, suitable clothing, rainproof tents, so it was promptly recognized that the morale of the worker depends on similar conditions; the meeting of these requirements, either through direct government action, as in the housing programs of the several governments, or through regulation of wages and the prices of necessities, became an essential part of national military policy. So also care of the wives and children of soldiers at the front, felt to be required by military morale, led to increasing attention to the situation of the families of workers injured or invalided, as a requirement of civil morale.

These governmental techniques and policies, though not in themselves systematic ideas, represented the principal contribution made during the years of the war to the history of social scientific thought. Where the genius of a period is primarily administrative, as among the Romans, or in periods of stress when the necessity is for the effective execution of a program, the idea in action is the one that pushes forward ideological advance. The operations of the War Industries Board, the joint control of Allied shipping, the collective agreements entered into by labor, the manipulation of public opinion by publicity and propaganda, the studied maintenance of morale, the emergence of an international conscience—these were idea-movements of the first importance. Instead of having been evolved and systematically presented by individual thinkers they were the sum of the intellectual behavior of the community at a critical time. Actually of course they were rooted in the period preceding the war; when the emergency came, all the ideas and techniques which had been developed in business, politics and publicity were pooled, and the usual barriers which might have ob-

structed their acceptance, or their passage from one sphere of activity to another, were broken down.

As the conflict went on, its import for the life of society became clearer. The first burst of militant enthusiasm gave way to a disenchantment with the aims of both sides and a consciousness of the plight of the generation. The war exposed all the tensions and frictions attendant upon the operation of the prevailing economic and social scheme, and pointed the contrast between the degree of development of natural science and the haphazard control over social arrangements achieved by social science. The events and news of every successive day revealed a group of nation states competing for territory, colonies and markets, using all the resources of alliance making, secret diplomacy and armament races, each entrenched in its position by a traditional theory of sovereignty and impelled by an industrial system which made insistent demands for expansion. Men realized with dismay the racial animosities slumbering within the political entity, the aspirations of suppressed groups for autonomy, the jealousies and professional pride of military bureaucracies, the emotional hysteria which an idea or ideal could evoke in an entire population. The blundering and stupidity of officials, familiar enough in the diplomacy which had brought on the war, became overwhelming when they resulted in huge losses of life. Chemical, submarine and airplane warfare suggested the sinister possibilities of the application of science to the art of destruction. And meanwhile the waste of human and physical resources continued, carrying with it an increasing psychological tension of sacrifice and repression. Efforts at peace making met ludicrous failure; governments on both sides had gone too far into the conflict to be able to save face through any arrangement short of victory.

With the signing of the Armistice came a momentary outburst of optimism. It produced in America President Wilson's liberal basis for world reconstruction, and in England such notably creative expression as the program of the British Labour Party. But the disappointing character of a peace treaty which apparently opened a score of doors to new international disputes put an end to this mood. There followed a "war after the war" of indemnities, military occupation, diplomatic intrigue and commercial discriminations. Outside the Ver-

sailles scene elements were not lacking to add to the confusion: the crash of falling monarchies, the proletarian struggles everywhere, the hardening of militant communism in Russia, the violence of reactionary dictatorships in Italy, Hungary and Spain, the hysterias of radical-hunting, the rise of organizations like the Ku Klux in America and the secret military societies in Germany.

The economic confusion paralleled the political. Expansion and impoverishment in Europe gave finality to a process which had for some time been gathering force—a shift in the balance of economic power from Europe to America, with perhaps an accompanying shift of cultural influence as indicated in the phrase "the Americanization of Europe." Attempts to apportion Germany's indemnity and to adjust the payment of the inter-Allied debts involved the Powers in a sequence of bickering and bargaining which, while it cast an acrid doubt upon professions of altruism, was chiefly significant in revealing the financial instability of powerful states and their dependence on a delicate network of international economic relationships. Even the prosperity of the United States, proceeding from its amazingly developed industrialism, had certain disintegrating effects. It produced a heightened pace of economic activity which antiquated the approved economic virtues of industry, thrift and reliability, and conditioned a new set of virtues clustering chiefly around the rapid acquisition of wealth through speculation. In Europe, particularly on the continent, currency inflation had far reaching consequences for economic confusion. A radical redistribution of wealth put the bourgeois property holders in a helpless position; the rise of prices bore most heavily on the salaried and professional classes whose incomes remained fixed. With the value of money dropping further each day spending became the beginning of wisdom, and a general upheaval of values resulted from the erratic course of prices.

The mood of discouragement which followed the war was due in equal degree, however, to general psychological readjustments, based on factors less tangible than those responsible for the political and economic disturbances but no less compelling in their effect on the popular imagination. The cupidities displayed at the peace conferences, the publication of hitherto secret documents, the "now-it-can-be-told" attitude, revealed the actual motives of self-interest operating beneath the pretensions

of diplomacy. Millions of returning soldiers brought with them the memory of a struggle without rules and without chivalry, a Gehenna of misery and despair dealing death in a thousand inglorious shapes and leaving the survivors with their bodies mutilated and shattered—a contrast to the glowing adventure pictured by the civilian enthusiasts for the “healing war.” Although regulation and war taxes had curbed more or less effectively the cupidity of the profiteers, the close of the war nevertheless found in every country fortunes that had mushroomed up while the soldiers were perishing in the field and the industrial workers were straining with overtime and excessive speeding up. The accounting of war losses, hitherto glossed over in the interest of morale or borne stoically in the excitement of a successful offensive, now fell with crushing weight upon the spirit of the masses.

Revaluations so far reaching as these, when combined with the inevitable reaction from the tensions of the war period, could not fail to bring in their wake a general destruction of those traditional ties and sanctions upon which social organization depends. The widespread redistribution of wealth effected a social mobility which played havoc with caste. There was everywhere an increased restlessness, expressed in the exploitation of every means of travel, the preoccupation with amusements and the prevailing nervous distraction, especially of a neurotic post-war generation which found it impossible to unlearn its need for excitement. The mechanization of life, which had long been perceived by social observers, was extended even to the outlying populations of Europe, and in the industrial centers of America it reached a new perfection. There came with it a change in the institutional character of the home and the family. The increasing resort to divorce, the emergence of the companionate, the weakening of the tabus against birth control, the winning of suffrage, the approach of economic equality, combined to produce a new position for women in society. The rapidity of this change, which carried with it new conceptions of the conduct within the range of woman's dignity, was for many persons one of the most obvious manifestations of what was considered a relaxation of morality, a decay of religious faith, a broadening of the distance between the younger generation and its predecessors. As happens in all periods of transition, the impression of disorganization was probably intensified

by the censorious commentary from the adherents of the old order who were insensible to the reorientation toward new social standards and arrangements.

This disorganization confronted social science with its characteristic problems. Surrounding institutions and attitudes, however, are only the material with which it works; the color of its thinking and its philosophical cast are determined by the prevailing mood of the period.

In the face of the revelations which followed the Armistice the exalted mood of sacrifice and spirituality was not able to survive and a stern withdrawal from the benefit-of-the-doubt attitude was inevitable. The veil was lifted from the pretenses of the previous age of innocence. The generation after the war, in its unmitigated repudiation of idealism, found for a time no stopping place short of a derisive cynicism.

This disillusionment and its expression in a studied resolve not to be fooled came upon the community with so much force that it quickly colored all attitudes and captured all sections of society. Even the least sophisticated evidenced its influence in their suspicion of all “theories,” their trust in science and the certitude with which they placed their faith in “facts” and stressed the uniqueness of experience as the test of truth. Among the intellectuals themselves the most esteemed attitude was an anti-intellectualism which took particular delight in pillorying the academies. Wilson's idealism, as a possible new regime in politics, began to seem somewhat ludicrous, partly, perhaps, because it had been unsuccessful. Success was esteemed as the proof of merit, for tangible results were more highly valued than altruisms which depended on faith. Even in the pulpit religion came to be represented less as a worship and more as an adjustment to the conditions of modern life. A book representing the founder of the Christian religion as a business man and the contagion of his faith as the triumph of salesmanship received a popularity which proved its ideals eminently compatible with the public taste. The history which the layman preferred to read was that in which the force of ideals was discounted, and a book giving a basically economic interpretation of the growth of American civilization had an unprecedented sale in the United States. In fiction the mood was evidenced equally by the “hard-boiled” dialogue of Hemingway, which seemed to express so adequately the unyielding surface of

experience, and by the accumulation of a literature of escape in schools so far removed from each other as those of James Branch Cabell and the writers of mystery stories. Nowhere, however, was the complete capitulation to this mood shown so clearly as in the bludgeon strokes of the "debunking" school of biography, and in the enthusiasm with which the concept of bunk was received and applied to every possible situation. "Bunk" was the answer of the post-war generation to the inculcated "morale" of the war years.

An important result of this trend toward greater interest in actualities was the shifted emphasis in educational method. This realism was responsible in no small degree for the noticeable inclination to discard the old methods of inculcating formalized knowledge and to stimulate the pupil instead to make his own investigation, analysis and deduction. Other influences also had much to do with the change, such as a fear of the "goose-step" standardization effected by uniform educational methods and centralized control, and the formulae of the newer psychologies and philosophies. The result was to give educational theory a flexibility and experimental temper for which a parallel can be found only in the great age of educational advance—the eighteenth century. There was also a greatly increased interest in adult education, not only in organized classes, but in its other aspects as lectures, clubs, discussion groups. Attempts at the humanization of knowledge found a ready audience, and popular studies for the lay reader appeared in all branches of learning. An important factor in this desire for "culture" was the greater leisure and new social position of women, which gave them an increasingly important position in the intellectual life. Women came more and more to constitute the major portion of the public consuming literary and artistic productions.

The most insistent of the newer educational interests was psychology. As an elective in institutions of learning, as a subject at popular lectures and commercially managed schools, as a therapeutic technique in social case work as well as in one's own individual adjustments, and even as a topic of conversation it overshadowed every other "cultural" interest. This popularity derived somewhat from the war, with its exposition of abnormalities and its problems of shell shock; it was certainly the result also of the strenuous character of modern life which made necessary a technique of

adjustment. Inseparable from the reliance on psychology as a method was the interest in personality in the application of that method. This was in part merely an application toward one's self, one's neighbor and one's hero of that desire for ultimates which informed so completely the temper of the time. It was undoubtedly one of the factors in the biography boom, in which the gloriously dead, who had been formerly the concern only of the historians, were now subjected to a psycho-analytical scrutiny for the curious. The same influence was to be found in the novel, not alone in the absorption with sex but also in the emergence of the "stream of consciousness" method, which found its way even into historical narrative, as in Carl Becker's *Eve of the Revolution*.

This self-examination extended itself to an unprecedented interest in the character of the modern world and the immediate social environment. Spengler subjected western civilization to a pessimistic analysis in his *Untergang des Abendlandes*, and Keyserling in a more nostalgic vein expressed a lyrical admiration for the highly contrasting oriental way of life. This increased awareness of contemporary culture found particular expression in a widespread interest in the new industrialism and in the potentialities of science and the machine for effecting far reaching transformations in our culture. America and Germany especially—the first a new culture inviting definition, the other a defeated group seeking a new orientation—experienced an outburst of national introspection which yielded revealing analyses of their respective civilizations. In America H. L. Mencken and Sinclair Lewis found a wide audience for an unsparing and unflattering summary of American life which Robert and Helen Lynd in an inductive study of a typical community (*Middletown*) found to be not very wide of the mark. Another group, represented by Van Wyck Brooks, Lewis Mumford and Waldo Frank, sought to isolate the American essence with an eye to its enduring contribution to the cultural stream. This heroic and concerted effort to understand contemporary culture carried with it a conviction that scholarship must concern itself with immediate problems, and an enduring and vital art must do its work in the context of contemporary culture and draw its material from it.

The principal character of the abstract thought of this period was a growing sophisti-

cation, which represented an inclination toward skepticism of apparent conclusions and with it an increased subtlety and self-consciousness of approach. There had been a tendency in this direction for a good many years, as evidenced by the work of Poincaré and the non-Euclidian geometricians, but in the years after the war it received an impetus which was due in no small degree to the congeniality of the prevalent intellectual disposition. Scholars showed their discontent with abstractions and *a priori* generalizations by their efforts toward a substantial realism in thinking, toward a greater immediacy between theory and the substance of theory. There was in all branches of science an increasing distrust of absolutism in thought, which found expression in a growing wariness of the "self-evidence" of axioms. The study of structural logic gave way to an experimental logic in which as much attention was paid to the authenticity of the premises as to the validity of the processes of reasoning. The researches of Einstein in physics made explicit the principle of the relativity of phenomena which was at the same time being evolved in analogous forms in other departments of thought. This theory, when applied to social science, threw the emphasis on the individual or the single event as the term of reference and effected a sense of the complexity of a problem and of social relationships which made William James' concept of a "multiverse" conform admirably to the intellectual temper of this period. The war had done much to prepare the way for such a conception by impressing upon people's minds the breadth of the horizon and the complexity and divergence of world politics, attitudes, institutions. In art particularly this had the effect of adding to the schools of realism an antithetical group which was doubtful as to whether the most effective statement of reality cannot be attained more accurately by indirection and suggestion rather than by naturalistic representation. Simplicity and unity were everywhere regarded with a suspicion that arose from a belief that if one pushed back far enough one found always the simple disintegrating into the complex. This sense of complexity was dangerous for many in that it often defeated impulses toward constructive effort.

A further issue of the widespread convictions of complexity was more limited in its reception but affords what may possibly be an indication of the trend of scholarly thought in the future. There was explicit recognition by many scien-

tists that any one of a series of divergent conceptions of the universe might be equally tenable, and the realization of this led certain thinkers to a skepticism of the value of the scientific method as it had been developed and crystallized. There were some who even expressed a discouraged sense of the futility of science. This attitude was distinctly contrary to popular faith in science as a panacea, but it was nevertheless a result to be expected as scientific thinking developed to such an extent that it defeated its own purposes.

In their attempt to escape the simplicity of unitary answers and yet avoid metaphysics, philosophers and social scientists were driven to a set of beliefs and techniques which were at once less demanding and more satisfying. They had resort to a quantitative objectivity which left little to judgment except the measurability of the phenomena and little to speculation except the interpretation of the results. Wherever theories had already been advanced and become tenacious they were subjected to a verification proceeding inductively and quantitatively. The dominant philosophy of the period was a pragmatism which ignored innate values and concerned itself with the attainable good, and the dominant psychology an experimental behaviorism which took nothing for granted except the primary significance of overt behavior. The extent of these attitudes may be measured by the impact of behaviorism upon method in the social sciences and upon education, and the ramifications of pragmatism in case law, pluralistic political theory, labor policy and social work, in institutional economics and social history.

All of these philosophical and scientific attitudes were merely the more recent accretions to an intellectual heritage as old as western civilization. Many of the older attitudes maintained considerable vitality and constituted the corpus upon which new elements were grafted. This confronting of the inertia of philosophic systems with the mobile and various currents of mood, belief and conduct in the general disorganization of the post-war period offers an approach to the understanding of the chaotic nature of the period. Every thinker carried the past in his brain; but he wrote at a time when a succession of new attitudes strove for survival, false starts and tentatives played themselves out or were deflected from their intention, bursts of feeling and eddies of belief made something of a stir before they were lost in the more

permanent currents of thought. Attitudes based entirely on the tensions of the war lost after a time their identity. Temporary flurries of extreme idealism and extreme disillusionment were equally fruitless of permanent results. Intellectually the period was one of startling contrasts and juxtapositions, one in which nothing from the past was abandoned, much was started in the heightened atmosphere of intellectual excitement and social transition, and very little was brought to completion. This gives the period a richness and variety which are at once a warrant of its fertility and vigor and a warning against summary analysis, for in its complexity can be found substantiation for almost any formulation of trends.

II. PSYCHOLOGY. The social sciences were probably more profoundly affected by the development and diffusion of psychological doctrine than by any other single influence that touched them. Psychology's penetration of social studies was already in progress in the late decades before the war. Wundt, the dominant figure in late nineteenth century physiological psychology, had crowned his work with an impressive contribution to sociology, and if his influence on the sociological system builders remained negligible it did at least operate to encourage the trend toward social interpretations among the psychologists.

From the opposite pole of mechanistic economic theory sporadic flashes of psychological insight began to appear. From the time of Jevons orthodox economic theory had been increasingly dominated by the impulse to translate the whole problem of value into "subjective" terms. Values were derived from wants, desires, and these psychological phenomena were generalized to homogeneity with no relevant differences that could not be manipulated by quantitative measurement. This subjective psychology had been vigorously challenged by the heterodox theorists of the time: Sombart, who found it necessary to draw upon a whole complex of psychological motives to account even for the thirst for indefinite enrichment; Veblen, who sought not only to break up the rigidities of subjective theory by an appeal to the motives and instincts of contemporary scientific psychology, but even more to establish a psychological basis for the Marxian theory of class consciousness. Veblen and his followers, Hoxie and Stuart, levied most heavily upon the theory of instinct presented by McDougall in his *Social Psychology*, published

in 1908. The same work exerted a marked influence upon sociological thought, operating toward the weakening of ambitious systems of sociology and the concentration upon problems of individual motivation.

Within the field of psychology itself several new leads having a significant bearing on the social sciences were opening up. The most important of these were the new approach to abnormal psychology under the leadership of Freud, the study of the "conditioned reflex" initiated by Pavlov, the studies of differences in intelligence inaugurated by Binet, and the study of organic groupings of perceptions, which received its impetus from the work of Stumpf and Husserl and was developed into a definite theory of Gestalt or configurationism at the hands of Köhler and Koffka. In each case the immediate application was limited at first to a narrow range of problems: psychoanalysis to psychotherapy; the study of the conditioned reflex to the interpretation of certain anomalies of behavior; the Binet tests to the detection of feeble-mindedness.

Setting out with a study of neuroses and other psychological abnormalities, psychoanalysis had effectively established the existence of a range of motives not appearing in the consciousness of the patient, but nevertheless determining his behavior. Not only was the "unconscious" capable of motivating action that otherwise would have to be explained as purely capricious; it was also capable of controlling the conscious motives. The old distinction between "real" and "professed" motives, with its implications as to good and bad faith, gave way in the psychoanalytic psychology to a distinction between unconscious and conscious motives, with implications of personal irresponsibility.

Within the psychoanalytic group itself grave schisms arose over the anatomy of the "unconscious." Of these one of the earliest was headed by Alfred Adler, who broke away from a loose alliance with Freud and set about developing the implications for psychotherapy and education of an assumed universal striving for superiority. A later schism was led by Jung, in whose system congenital differences in type count heavily alongside of the submerged data originating in conscious experience. A third important schism was that of Rank, with its emphasis upon traumatic influences on behavior. These differences have had no significant repercussions in the social sciences. The social scientist, and the psychiatrist as well, have drawn eclectically

from the several schools, following the pragmatic principle that any psychoanalytic tool is good as long as it works.

Prior to the war the application of psychoanalysis to psychopathology was extremely restricted. The intolerable terrors and hardships of the fighting revealed the prevalence of psychological abnormalities in the rank and file drawn to the front. "Shell shock," a phenomenon not unknown in earlier wars but disposed of naïvely as "cowardice," became so common as to demand hospitalization and treatment like any physical wound. The services of psychotherapists were requisitioned by all the warring nations, and the methods of psychoanalysis were found useful. Naturally the war-time recognition of the wide distribution of psychical abnormalities was carried over into the reconstruction period. A host of behavior abnormalities formerly treated as vices or crimes came to be regarded as manifestations of psychopathology, demanding treatment rather than repression, prophylaxis rather than exemplary punishment. Psychoanalytic methods consequently gained wide currency not only in social work and in penology but in education, where they formed a main constituent in the increasingly popular courses on "mental hygiene."

Far subtler, but probably more potent, was the influence of psychoanalytic study upon the intellectual temper of the post-war period. The enthroning of the "unconscious" as the dominant factor in behavior was eagerly applauded by a generation in revolt against "bunk." It became possible to set up the concept of unconscious propaganda alongside of the less convinced and hence less effective conscious propaganda, as a resistance to every kind of social compulsion. Noble sentiments operating oppressively might be explained, not as formerly in terms of hypocrisy, but in terms of unconscious self-seeking motives. Thus the unconscious became a potent means of personal "liberation," to the horror of the conservative, who was becoming aware only gradually that the emphasis of psychoanalysis upon the "libido" was the least revolutionary aspect of the tendency.

The hold that psychoanalysis had achieved for itself was obviously reflected in the literature of the period, as for example in the fiction of Joyce and Lawrence, in the dramas of O'Neill and above all in biography. Freud himself had set the pace in his interpretation of Leonardo. A host of biographers followed after, scrutinizing the records of great men of all the ages for

indications of their "real" motives, that is, their unconscious, often their meaner, more selfish motives. The economic interpretations of the pre-war generation had made a mere figurehead of the "great man." The post-war spirit infused into the great man a superior reality, a more representative quality, but more representative of the unconscious egoistic strivings of his time.

For almost a decade the discoveries of Pavlov led a half animate existence in the laboratories of the animal psychologists. Among the other psychologists, even in Europe, they never exerted more than a mediocre influence. In America they were taken over by Watson, supplied with an effective name, behaviorism, and launched with the modest claims of a new, completely objective method of studying psychological phenomena. By the close of the war Watson had already trained a considerable number of able disciples who were rapidly building up a behavioristic literature. With the publication in 1919 of *Psychology, from the Standpoint of a Behaviorist* Watson undertook to maintain the omniscience of the behavioristic method in the handling of all psychological problems of a strictly scientific character.

For the social sciences the importance of behaviorism was partly methodological, since it was seized upon by many social scientists as a justification for their preference for concrete studies and their aversion to the large generalizations of the preceding generation. Its chief bearings, however, were upon education and family relations. In maintaining that personal character and ability are the products of "conditioning," Watson was led to concentrate his attention upon the earliest years of life. The preschool child became the most important object of educational effort. And since the preschool child is mainly subject to conditionings originating in his immediate family environment, a first task of educational policy was an attempted revision of family institutions, in order to create a more rational milieu for the development of character.

Like psychoanalysis, behaviorism operated to dissolve the sense of personal responsibility. A forger, a perjurer, a thief had been improperly "conditioned" in childhood. Their cases demanded "reconditioning," and the brute repression effected by criminal law should eventually give way to a rational technique of reconditioning. The doctrine fitted admirably into the temper of the times and attained a temporary currency far beyond the academic world.

Both psychoanalysis and behaviorism, while releasing the individual from the burden of personal responsibility, left an open way for social perfectionism. Both have inherent leanings toward social action. This is not true of the psychological implications of endocrinology, which for a brief space appeared over the intellectual horizon only to sink back into pure physiology. What one really was, according to this doctrine, was determined by the constitution and functioning of his endocrine glands. Glandular unbalance, most often irremediable, was responsible for grave aberrations from normal standards; a happy constitution of the glands laid the true basis for achievement. Endocrinological psychology attained a modest place in psychiatry, criminology and in social work. Beyond these technical fields its influence promptly disappeared.

Far greater importance for the social sciences must be assigned to Binet and the "intelligence tests" that have grown out of his work. While the theory and practise of intelligence testing were already well developed before the war, they received in America an enormous access of popular interest from their wholesale application to the examination of recruits, with a view to the selection of those fitted by character for promotion. After the war they played an increasingly important part in American educational administration and were also applied sporadically in the selection of industrial personnel. Their underlying assumption of congenital differences in intelligence gained almost universal currency in America and exerted an influence by no means negligible upon political policy—notably in immigration legislation and the so-called "eugenics laws" of the states.

For social science the most important bearing of the intelligence tests has to do with democratic theory. That theory reached its highest point in the period of environmentalism of the late eighteenth and early nineteenth centuries. Those who accept as valid the theories of the Binet school must inevitably conclude that the traditional democratic theory is unworkable. A large—and according to the eugenicists, increasing—fraction of the population is congenitally unfitted for political responsibility; and only a minute fraction is actually capable of a high order of political activity. It is worth noting that the theory of the intelligence tests, while widely accepted by educators, administrators and the conservative intelligentsia, was indignantly repudiated by the restless and dis-

illusioned "younger generation." By them it was considered reactionary, an "unconscious" defense of the old order of inequality and oppression.

One final tendency in psychology needs to be noted, that of the Gestalt or configurationist school. Its fundamental conception, that organic groups of facts are perceived as unities, not pieced together in the mind fact by fact, has been pressed into a bearing on social theory as a truer statement of the position of the individual in the group. It has also begun to penetrate educational theory. But as a late comer its influence upon the social sciences in the period under review is modest.

No summary of the definable influences of psychology can give an adequate account of its real importance for the social sciences in the post-war period. Especially in the later part of the period psychology was "in the air." No social scientist not altogether impervious to the general movement of thought could fail to pay it tribute in the laying out of his problem, in his critical judgment of his own methods. No scheme of social reform could be launched without close survey from the "psychological approach."

III. GEOGRAPHY. In so far as geography is allied with the social studies it was until the twentieth century scarcely more than a subsidiary interest and a point of view on the part of historians or social theorists. In the early decades of the new century, however, there was an extension in the scope of geography and also an increase in its effect on the methodology of the other sciences. The shifted emphasis among geographers and the increased interest on the part of other scholars were stimulated by factors from many different directions: the increased interdependence between one part of the world and another; the development of anthropology and the awakened interest in the hypothesis of races; the general trend in all branches of study away from arid description and in the direction of an analysis of genesis, causes, interrelations, results. The World War brought a new necessity for knowledge concerning remote places and quickened the perennial curiosity about them; it upset old notions of national arrangements and brought to the focus of attention regions hitherto disregarded. It forced a universal recognition of the bearing of topography upon military strategy; the diplomacy of the war period, with its anticipations of the redrawing of bound-

aries in terms of military defense, nationality, economic resources, accessibility to trade routes, elevated the map to the rank of a first principle of higher politics. At the peace conference every delegation had its corps of trained geographers to bolster up its territorial claims. An improved art of cartography offered a technique for managing new materials and made possible a more analytic as well as a more concrete development of the science.

It was in the development of human geography, however, that the science began to achieve a directed interest in cultural problems. Geography had always contained something of ecology. In fact environmental determinism, which had flashed as a bright bubble to a good many social theorists, at times claimed the energies of this science too. Environmentalism involved the study of all of human culture in relation to physical phenomena. When the belief was discarded that the physical world directly determined cultural forms, the realization remained that there was nevertheless a relation which geography could claim as its basis of study. The study of human geography was the result, inaugurated by Ratzel with the publication of his *Anthropogeographie* (1882-91) and carried on by Ellen Semple, Elisée Reclus, Vidal de la Blache, Jean Brunhes. In the process of its development certain aspects of man's activity became particularly emphasized and were separated as distinct divisions within the science—commercial, political, economic geography. From this extension of interest the other social sciences derived less of actual consequence than did geography itself. This very impetus in its own domain, however, resulted in bringing the subject closer to the foreground in social study. History, in particular, began to pay greater attention to the background of climate, soil and physical environment.

As the content of the science increased, geographers came to feel the necessity for a specific basis of study before their results could become anything more than mere preliminaries to future collation. Their method of dealing with new materials had remained for the most part undirected and inchoate and left the science in a position of indecision as to its purpose, and confusion as to its achievements. It was largely because of this need for a unity of approach, similar to the method of experimentation in the natural sciences, that the concept of regionalism was adopted. The content of geography remained the same but its method of study was

adapted to an intellectual milieu which produced the case method, institutional economics, behaviorism, political pluralism and stream of consciousness.

The thesis of regional geography is that a more provocative means of studying man in relation to his environment is to concentrate attention not on the reciprocity between them, in terms of either physical or cultural phenomena, but on a specified area in which the works of man and the works of nature, of the past as well as the future, will be studied with as great a degree of thoroughness as possible, letting the conclusions shape themselves. The ideal of objectivity of course is blurred by human conditioning, but regional geography stands for a method of investigation which is likely to prove of value in the orientation of the science. It resulted, particularly in France, in a host of localized studies which integrated the culture of a community with unaccustomed clarity and suggested provocative possibilities for social control.

The tendency of geography to turn toward regional studies raises afresh the question of its province and its unity. As the study of geography moves from the general to the specific in its development from physiography to an analysis of culture areas, it deals with increasingly complicated problems in which the influence of physical factors alone is a less and less sufficient explanation. The location of industries, the character of social organization and institutions, may be influenced by natural conditions, but there are so many further considerations that must be taken into account in reducing to terms the culture of an area that physical facts alone can serve the geographer only as a point of departure. In fact as he ceases to be a physiographer he comes closer and closer to the craft of the anthropologist, the historian, the sociologist, the political scientist, the economist. In this regard geography represents a close analogy to history, which is also necessarily eclectic. History describes its material in time with some regard to place; geography works on the basis of place with some regard to time. They must both consider the entire cultural structure. This complexity, which increases as geography becomes more critical of its purposes and methods, renders it, like anthropology, an exercise in synthesis. In so far as geography is in itself a social science it must be an analysis of the relationship between the life of the community and the natural and the cultural landscape; in so far

as it affects the work of the other social sciences its influence must still be confined to its method of approach and its emphasis on the possible effect of physical surroundings.

IV. ANTHROPOLOGY. In the early decades of the twentieth century anthropology passed through its novitiate and attained a considerable maturity. At the beginning of the century the German folk psychologists, the French prehistorians and sociologists, the American field investigators attached to museums and government departments, the British school whose halcyon grace of writing has made it classical, were quarrying rich veins of material and erecting theoretical structures which had to be critically overhauled. The scattered ethnographic literature, much of it as haphazard in method as the group of travelers' tales whose tradition reaches back to Herodotus, gave way to arduous field studies whose objectives and methods were mapped out at the very start. The divergent tendencies and pioneer tentatives of the formative years began to be integrated into a more unified sweep of research and interpretation which made anthropology the study par excellence of culture.

No study suffers so decisive a development in the course of a few decades unless the explanation is deeply rooted in the complex of relevant influences that constitutes its setting. Methodologically the study was an outgrowth of the desire of social scientists in the latter nineteenth century for some sort of comparative or historical method which would afford relief from their self-contained systems. Scholars impatient at being restricted to the study of occidental communities as revealed in written records sought replenishment by breaking into alien and uncharted reaches of intellectual experience. Early interests in prehistory linked anthropologists with archaeology, and the physical anthropologists were absorbed with biology and statistics. But the principal impetus came when occidentals were brought into contact with the primitive cultures of Africa and Asia as a result of imperialist expansion and missionary zeal. The arts of life "in darkest Africa" seemed to offer fresh and luminous comparisons with our own culture. On such subjects as religion, sex and race, which received emphasis in the writings of Tylor, Frazer, Robertson Smith and the other early writers, hope ran high that anthropology would provide the final word. It was a not impossible surmise that if bedrock was to

be found anywhere in the search for the essential in social behavior one might think to find it in the uncontaminated impulses of the "savage" and the "primitive." A "great society" bewildered by its own mechanisms and weighted down by its accretions was fertile soil for the cult of primitivism. Moreover to scholars seeking to study human society not piecemeal but as a totality the small primitive community offered the entire range of cultural activities in a compass small enough to be envisaged by a single investigator; and it had the additional merit of being so alien to him that he could hope to approach it with the detachment which stamps the exact science. Field studies undertaken in such a spirit accumulated so rapidly as to be increasingly unmanageable by the conceptual apparatus of an earlier order.

In this context anthropology broadened, lost some of its crotchets, became subtilized, reached for maturity. It did not, however, in the process of becoming a cultural study, abandon its earlier interest in archaeology and physical anthropology, but rather attempted to fit them to the purposes of the newer interests. Archaeology, always of service in uncovering skeletal remains and artifacts and thus piecing out the broad outlines of man's history, received added meaning as an instrument in plotting the geographical distribution and time sequence of culture traits which the diffusionist controversy made important. Kidder and Nelson in the southwestern United States, Uhle in Peru, Joyce and Spinden in Mexico and Central America, archaeologists in Egypt and Mesopotamia, with the aid of elaborate and scientific equipment and considerable financial support, utilizing the developments in the art of photography and even in aeronautics, applied themselves with substantial success to the task of discovery and historical reconstruction.

Physical anthropology, which concerned itself chiefly with the development and distribution of racial types, achieved a more stable if greatly moderated position in the new alignment of anthropological interests. Its early dominance in the science was due in no small degree to the fact that its data lent themselves most readily to metrical and statistical study and presented thereby an appearance of objectivity. The investigation of the racial history of man in its sequence from the anthropoid apes through the Heidelberg and Neanderthal specimens to the contemporary distribution of racial types required for adequate study a rigorous technique

of exact measurement; by 1914, as a glance through Rudolf Martin's *Lehrbuch der Anthropologie* will show, this technique had attained a high degree of complexity. At times it tended to lose sight of its instrumental character; at times it was deflected from its primary intention into arid excursions and unscientific uses. But in general the later work in this field shed increasing light on the origin of contemporary racial types, the determination of their ancient habitats and the course of their migrations, the intensification of their hereditary traits in isolation and their modification under new conditions of physical and social environment.

The postulates of such a study being those mainly deriving from Darwinism—evolution through heredity, environment, selection and mutation—its fortunes varied with the refinement of these postulates and the fluctuations in their scholarly acceptance. The emphasis on the purely biological influences, deriving from Galton and Pearson, had to be qualified; scholars came to recognize that "man in the very fact of culture transcends his biological equipment" and became aware of the difficulty of separating the somatic from the social. There was throughout an extension of the base on which the study rests. A discipline which began with the primary intention of ascertaining the antiquity of man and tracing his natural history broadened into a study of the biological factors underlying human phenomena.

Outside the field of scholarship a set of events occurred to heighten the tension of the surrounding emotional atmosphere within which scholarship is compelled to work. The growing consciousness of nationality before the war, the hatreds arising from the war, the problems raised by immigration and by diverse racial groups contained within political boundaries, released a poisonous cloud of invidious racial claims, accusations and refutations which found expression in a pseudo-anthropological literature as well as in popular acceptance. The controversy precipitated the demand for a trial-balance of the conclusions of anthropological science. The crucial question was of course the correlation of physical race characteristics with different degrees of cultural achievement. The answer of the earlier race theorists would have contained much more certitude than did the prevailing critical attitude of this period. Although some students did not abandon the hope of finding physical criteria for races, there was an increasing volume of scholarly opinion

which held that the concept of race is elusive, that any so-called race may contain many subdivisions and a wide range of variation, that it is difficult to define the physical criteria of a race, and finally that differences in the civilization of two racial groups can be explained historically without introducing any assumptions of biological superiority.

Closely related to this episode, in its bearing on the existence of a "talented race" on whom mankind is presumed to draw heavily for cultural advance, was the controversy over the diffusion as against the independent origin of cultural traits. Drawing into its orbit every important school of thought this became the moot question of modern anthropology; its insistent claims for attention gave this period a highly methodological color and tended to divert scholarly effort from more fertile channels.

The chief impulse to the controversy came from the reaction of modern critical anthropologists against the classical school of Morgan, Tylor and Frazer, whose concern had been to trace the history of culture in an evolutionary unilinear progression, as if by some preconstructed escalator mankind had mounted to its present level of Christianity, monogamy and occidental science. Deeply under the influence of Darwin and Spencer they mapped out a succession of stages through which each culture was likely to pass in its institutional development. Modern critics of this theory, taking as a typical example the evolution of marriage, pointed out the fallacy of premising a sequence of promiscuity, group marriage, polygyny and monogamy. But the chief controversy raged over a corollary of evolutionism. If, as Tylor held, institutions develop "in a series substantially uniform over the globe," this would be possible only on the assumption of the psychic unity of mankind. And this in turn leads to the position that cultural advances need never be borrowed by one community from another, but are evolved independently.

In the full swing of the reaction against this position German and English theorists attempted to explain the building of cultures by the concept of diffusion from one or several centers. Graebner, followed by Schmidt and Koppers, set up a scheme of three primary *Kulturkreise* corresponding to divergent types of economic organization. G. Elliot Smith and W. J. Perry went even further and contended for a monistic pan-Egyptian origin of culture. Both of these diffusionist schools denied the

possibility of independent invention in explaining cultural parallelisms. The simplicity of the antithesis and the sensational character of the pan-Egyptian hypothesis undoubtedly counted for much in the attractiveness of the dispute, but the controversy itself is an earnest of the genuine intent in modern anthropology to penetrate to the origin of culture and the nature of the cultural process.

The prevailing tone of anthropological theory after the war was critical. The early formative period had produced hypotheses which suffered considerably from the exuberance attendant on the launching of a new science, but whose vitality was evidenced to some degree by the later concern to disprove and qualify them. One has only to mention such concepts as animism, mana, tabu, totem, folkway, matriarchate, exogamy, domestication, pre-logical mentality, and each of the terms, in addition to whatever specific meaning it has for us, carries along a penumbra of polemic discussion and intellectual possibilities that betokens the creative idea. With so rich a start the next stage was inevitably one of critical concentration. Tylor's concept of animism, Durkheim's theories of primitive religion and the role of the group, the whole conception of the kinship scheme, the force of tabu, the rigidity and compulsion of custom, the nature of primitive mentality and the stages of primitive economic life—all of these concepts were unsparingly subjected to reconsideration. Marett, Malinowski, Radcliffe-Brown, Thurnwald, Vierkandt, Boas, Lowie, Kroeber, Goldenweiser, Sapir, Radin, Benedict and Wissler, while varying widely in the character of their emphases and the nature of their conclusions, were all animated by an essentially similar critical intent.

This theoretical sobriety was nourished largely on the exacting influences of the new mass of descriptive literature. There had been in the earlier period an ample number of missionary reports, of which the seventy-three volumes of the *Jesuit Relations* in the field of the American Indian will serve as an instance, and chance descriptions by travelers. These were followed by monographs from scholars who came to their task with more zeal and literary flourish than purposive equipment. It was largely researches such as these that formed the basis of works of synthesis like Frazer's *Golden Bough*, and the validity of the resultant theory derived rather from the cumulative impressive-

ness of a monumental mass of material than from the authenticity of the individual sources. The closer grappling with realities that was the dominant note of the critical period finally sent the theoretical scholars themselves into the field. There followed an output of excellent monographs in the best of which industry and scientific equipment were united with a vivid insight into the community studied. Seligman's *The Melanesians of British New Guinea* and *The Veddas*, Rivers' *The History of Melanesian Society*, Westermarck's *Marriage Ceremonies in Morocco*, Spencer and Gillin's work on the Central Australians, all appeared between 1910 and the outbreak of the war. The Jesup Expedition to Alaska organized by Franz Boas and the Cambridge Expedition to Australia organized by A. C. Haddon were outstanding large scale cooperative attempts at field work. The work of Boas' students among the American Indians and in other regions and Malinowski's series of monographs on the Trobriand Islands (especially his *Argonauts of the Western Pacific*, 1922, and *The Sexual Life of Savages in Northwestern Melanesia*, 1929) show that the new and more regimented methods for conducting a field trip had not destroyed the ethnographer's gift of imaginative sympathy.

These local studies and the accumulated geographical-historical material which had to be put in order after the diffusionist controversy and plotted for the distribution of anatomical and culture traits tended to make the anthropologist map-conscious. He charted the world for purposes of intensive study, so that to be a specialist meant to know everything about a part of the map. The rapid disappearance of primitive races through conquest, disease, labor exploitation and cultural contacts made the immediate accomplishment of this task imperative.

A belief prevalent among anthropologists regarded the field trip as the mainstay of anthropological method and credited the body of literature deriving from it as being the indispensable basis of all induction and inductive verification. To establish a basis for comparison of data a roughly uniform conceptual technique was worked out which divided the cultural life of the community into certain principal activities and studies each in relation to the others. The language, the social organization, the religion, the knowledge, the technology, the economic life, the law and government, the sexual and aesthetic life of the community, as well as the anatomical and physiological aspects of the

natives, were subjected to a curious and detached scrutiny by a kindly, bespectacled white man, heavily swathed in mosquito netting and dosed with quinine. Elaborate and voluminous notebooks and photographic and moving picture cameras helped to make permanent and accurate the impressions of the moment. The field study in its present highly developed form is confederate with the critical method, since its principal use is to subject the hypothetical flights of expansive theorists to verification and lay the basis for a new theoretical synthesis.

When such a synthesis comes it will in all probability attempt to encompass the origin and history of culture. The principal positive theoretical position of the early decades of the twentieth century was the glorification of culture. The word loomed more important than any other in the literature and in the consciousness of anthropologists. Culture traits, culture complexes, culture types, culture centers, culture areas, culture circles, culture patterns, culture migrations, cultural convergence, cultural diffusion—these segments and variants point to an attempt to grapple rigorously with an elusive and fluid concept and suggest incidentally the richness of such a concept. Concern was rife over the birth of culture, its growth and wanderings and contacts, its matings and fertilizations, its maturity and decay. In direct proportion to their impatience with the classical tradition anthropologists became the anatomists and biographers of culture. Taking its point of departure from the diffusionist controversy, nourished by the schools of geographical distribution and historical reconstruction but not limited to them, the idea became pervasive that the proper study of the cultural anthropologist is culture. As a broadening influence and as an integrative force it did more than any other single fact to give anthropology its recent character. Whatever the differences in specific doctrines and techniques between the science in this and in the previous period, the principal change was this period's complete absorption with culture.

This common concern with culture has made the question of the division of anthropologists into schools of no supreme importance. The principal line of cleavage into schools has already been discussed—that centering around the issue of diffusionism. But the more formal and recognized division into schools runs rather in terms of the method and interest which the

particular anthropologist used in approaching his data. Thus a psychological school can be traced, dating from Wundt and the other German folk psychologists. This approach had fortunes varying of course with the stability of the developments within the field of psychology, but the latter soon demonstrated how indispensable it is in the study of the contact of cultures and the transmission of culture traits. Vierkandt, Thurnwald, Van Gennep, Goldenweiser, Sapir and Lowie were deeply influenced by such an approach and made some strides toward a psychological approach in the wide sense of seeking an insight into the spirit of other cultures. Earlier anthropology had made out the individual as completely submerged by the group. Schmidt, Marett, Malinowski, Boas and Radin used the psychology of individual differences effectively in restoring the balance between the compulsion of the group on the individual and the influence of the talented individual on the process of culture. A crude individual psychology was used by Lévy-Bruhl in describing the primitive mind as pre-logical (*Les fonctions mentales dans les sociétés inférieures*, 1910). Even the psychoanalytic approach was used, first by Rivers in his work on dreams and then by Seligman in his recording of primitive dreams. Malinowski's work on the psychological basis of sexual beliefs and kinship systems afforded considerable insight into the rationale of social organization. The sociological approach dates from Robertson Smith, Durkheim and such of the latter's followers as Mauss, Hubert and the *Année sociologique* group. In British anthropology Malinowski and Radcliffe-Brown inaugurated a functional school which, whatever its future stability, will be of service in calling attention to the necessity of studying an institution in relation to the essential role it plays in the community. Such an approach, if it could be made persuasive for colonial administrators, imperial statesmen and missionaries, might retard the ruthless process of the destruction of those native institutions which, in an occidental context, seem purposeless. The school which had the weightiest influence during the later years of this period was the historical school—mainly American—under the leadership of Boas. It was in the forefront of the new critical attitude in anthropological theory with its emphasis on meticulous monographic study, unyielding critical austerity and an instrumentalist use of historical and geographical material.

Such a classification of schools is of little

value except to indicate that in the contacts with the other social sciences that have attended its development anthropology has been affected by their viewpoints. Through one approach or another the positive theoretical work of cultural anthropology went on—the study of the nature of primitive institutional life. Rivers (*Social Organization*, 1924), Lowie (*Primitive Society*, 1920), Malinowski, Thurnwald and Radcliffe-Brown in the intricate yet central problem of social organization, with sanity and insight dealt with kinship systems and group units; Lowie (*The Origin of the State*, 1927) penetratingly demonstrated the existence of territorial political organization even in those primitive units which seem most amorphous and anarchic; Malinowski (*Crime and Custom in Savage Society*, 1926) showed that among the primitives as among us law and custom are disobeyed as well as obeyed, and that the intricate pattern of individual impulses and group compulsions can in no society be reduced to a formula; Radin (*Primitive Man as Philosopher*, 1927) and Boas (*Primitive Art*, 1927) portrayed in the aesthetic realm too a process of the creative imagination that differs in no essentials from our own; the trend in religion (Lowie, Marett, Benedict) was to attenuate our traditional condescension toward the superstitions and irrationalities of the savage; Sapir (*Language*, 1921) traced the historical and psychological factors underlying language forms; Malinowski ("The Primitive Economics of the Trobriand Islands" in *Economic Journal*, 1921, vol. xxxi, 1-16) and Firth (*Primitive Economics of the New Zealand Maori*, 1928) showed that the economic activities of a primitive community, though they appear in the light of our own standards to be whimsically motivated and erratically directed, are dynamically linked with the social organization of the community and the psychological heritage of the natives.

More than in any positive dissemination of anthropological concepts, methods and literature, the outstanding significance of anthropology for the social studies in the period under review lies in what one student has called "the anthropological attitude." To be sure, the creation by anthropology of the concept of culture and its decisive influence on the other social studies, notably history and sociology, is of first rate importance. So also is the light that anthropology has cast on the problems of social organization. But more enduring than a theory is a way of thinking. And the anthropologist's way

of thinking has reached beyond his formal contacts with the other social studies and, like psychoanalysis and relativity, has entered into the main stream of twentieth century thought.

What this way of thinking is needs a round-about explanation and even then can only be adumbrated. Our own modern institutions are encumbered and entangled with their historic accretions and so self-evident to us that the clear outlines of their nature and purport are blurred. So we seek the primitive instance and think to find there the answer to our queries concerning the nature of institutional life. We expect with a certain naïveté to find there the essential disentangled from the accidental, whether it be the nature of law, the origin of the state, the psychology of sex, the essence of religion, the destiny of the individual life. Our unconscious premise is that the primitive community is a sort of laboratory or a vacuum test tube in which we can reduce all extraneous elements to a minimum and keep our eye on the main intent of the chemical reaction.

We may of course be defeated in our expectation. We may find that primitive life, though in a different way, is as complex as ours, and that what we thought to be the essence of an institution is only the result of the historical accidents of the primitive community itself. Imbedded in its own context the institution may still elude us. Thus after a half century of the anthropological approach to religion inaugurated by Robertson Smith we are possibly as far as we were from an understanding of the nature of religious experience. But such an approach always heightens the metabolism of our minds and breaks down our parochialisms.

In this dislocatory effect lies the chief intellectual value of the anthropological attitude. It views culture with a detachment that comes, not as the scientist seeks to attain it, through a heroic asceticism and effort at concentration, but with a certain slyness and indirection. The strangeness of the contrast between our way of life and the savages' surprises the student into a state of detachment. We always tend to view an eccentricity as from the outside. And in the reflex we are surprised into a similarly detached view of our own culture, seeing it not as endowed with an unyielding and inherent place in the scheme of things, but as mutable and merely a variant. The principal application therefore of anthropology to modern life has so far come not through the attack direct, but by way of a devious and unexpected illumination.

V. SOCIOLOGY AND SOCIAL WORK.

The grandiose projects for a unified science of society launched by the system builders of the late nineteenth and the early twentieth centuries had already begun to lose credit in the last decade before the war. On the one hand invading formulations from other disciplines occupied successfully much of the ground of sociological theory: anthropological formulations (Vierkandt, Durkheim); philosophical (Max Scheler, Jerusalem); economic (Weber, Sombart); historical (Troeltsch, Salomon); geographic (Le Play, Patrick Geddes). On the other hand the professed sociologists themselves turned away from central problems to special studies in social policy such as criminology, problems of education, population, race. An important colony of the older sociology, "charities" and the allied problems of poverty, had declared its independence and set up a system and techniques of its own under the rubric of social work. The effect of the intellectual disorganization attending the war and reconstruction was to accelerate these tendencies toward dispersal of sociological interests while at the same time giving a powerful impetus to sociological study as a whole, especially in Germany and in America.

The energies of the sociologists in America were mainly devoted to practical problems and the closely related problems of method. Disillusionment with the sweeping generalizations whose susceptibility to propagandist uses had been made all too manifest during the war emphasized the importance of objective, quantitative methods. While it was in the United States that the quantitative method was most ardently promoted, it was also applied extensively in Europe, notably by Leopold von Wiese, who would restrict sociology to the listing and characterization of all discoverable human interrelationships. American sociologists, particularly the Chicago school, developed an indigenous variant of the quantitative method, an elaborate technique of map making, in which various types of group and area configuration and change could be charted. The method is cumbersome and expensive but makes possible a fruitful cooperation of geographers, anthropologists and sociologists. Before the war the favorite method of practical sociological research was the social survey, which usually centered attention on such matters as housing, poverty or prostitution. The social survey was still employed after the war by the Geddes school in England but was being replaced in the United

States by more intensive studies of functional groups or areas and by the case method. The latter was given sociological standing by Thomas and Znaniecki's *The Polish Peasant in Europe and America* (1918-20) and it came to be widely used by sociologists seeking to emphasize the importance of the individual in the complex of social forces. Later certain anthropological sociologists who emphasized the uniqueness of every concrete situation attempted to apply the case method to the study of groups or institutions.

Such methodological changes, significant as they may be for the direction of sociological development, excited remarkably little interest in the nature of sociology as a science. A few scattering discussions of sociology as a humanistic or a natural science (Znaniecki); a faint repetition of the arguments for the study of the socialized individual (Floyd Allport) as against the study of collective behavior (R. Park); and scattering attempts at comprehensive classifications of social processes, made up the chief part of American post-war theoretical sociology. It was only the multiplication of textbooks that gave American sociology what appearance it had of definiteness of content.

In striking contrast was the richness of the discussion of purpose and method among German sociologists. It was animated partly by the desire to justify a new discipline and solidify its academic position, for sociology there had never attained important academic standing. A group of remarkable theoretical tendencies found expression in the post-war period. In 1921 a sociological journal was launched, the *Kölner Vierteljahrshefte für Sozialwissenschaften*, edited by Christian Eckert, Hugo Lindemann, Max Scheler and Leopold von Wiese. A number of research institutes were established, of which the best known is the one founded at the University of Cologne by von Wiese.

But the German interest in theory had a more positive quality as well; it was part of a general philosophical and methodological movement or group of movements which infused themselves into all German social scientific work. The central idea of this philosophy was the distinction between natural and cultural science, the first of which uses the method of description and analysis, the latter that of interpretation (*Erklärung*). The distinction was of course not new. In its modern form it was most clearly expressed in the work of Wilhelm Dilthey, E. Husserl and Max Scheler. Dilthey (1833-1911) stressed the

inadequacy of description and analysis in the social sciences. The method which he proposed involved the assumption that there is in a single experience a complexity of structure which forms the basis for an analysis of the essential elements of that experience and leads to the construction of ideal types of situation or character which serve as terms of reference for all future study. The influence of this conception was seen before the war in the psychopathology of Karl Jaspers; it was one factor in Max Weber's use of the type concept; and it found definite psychological exemplification in Edward Spranger's *Lebensformen* (1927) and *Psychologie des Jugendalters* (1926). The implications of the method were more profoundly developed by the logician and philosopher, E. Husserl, founder of what came to be known as the phenomenological school of thought. Husserl's work was essentially epistemology, but there was hardly a social scientist in Germany who did not feel the influence of his theories. The outstanding later representative of the school, Max Scheler, was philosopher, psychologist and sociologist. It was even more largely through Scheler's work that Max Weber was drawn within the influence of the school; the anthropology of Vierkandt, the history of Troeltsch, the Gestalt school of psychology all found inspiration in his methods. The more specific bearing of the method on sociology was summed up in Scheler's introduction to the *Versuche zu einer Soziologie des Wissens* (1924), a symposium of which he was editor. The book is composed of discussions of general and special forms and limitations of the cognitive structure. Scheler himself attempted to outline a sociology of knowledge. Sociology, according to the phenomenological school, should be the science of social relationships, but not merely of existential relationships. It is essentially the science of ideal types and categories of types. Scheler applied the method in an analysis of sympathy, or the phenomenology of love and hatred (*Wesen und Formen der Sympathie*, 1913, 3rd ed., revised, 1926).

Scheler's influence is an indication of the strength of the German reaction against positivism. Two other specifically sociological influences have to be taken into account in a survey of the German interest in theory: the work of Simmel in the delimitation of social categories and that of Tönnies in emphasizing the role of habit in social life and in distinguishing between society and community. Alfred Vierkandt and Leopold von Wiese made notable

attempts to link the ideas of these two scholars into one system. Vierkandt made use of the community-society distinction but was chiefly concerned with the universal motives that bring about social relationships. He regarded McDougall's theory of instincts as the most important contribution to the understanding of human nature in recent times. Von Wiese, the best known of the German sociologists of this period, sets out to classify the whole field of human relationships. The influence of the phenomenological school is seen in his insistence that neither *Beziehung* nor *Gebilde* can be defined directly but must be understood and defined indirectly. Von Wiese, however, differed from most of the followers of Simmel in his belief in the behavioristic and quantitative approach. He attempted to state his analytical hypothesis in quasi-mathematical terms; he used statistics and expressed an interest in behaviorism.

In Italy as in Germany sociology had no academic standing and its students came from other fields. Pareto in his economic studies developed an interest in a mathematical statement of social laws and his *Traité de sociologie générale* (1917-19) was an attempt to apply the method to sociology. Pareto insisted on the relativity of all laws. He set out with the assumption that the bulk of social actions are non-logical. Analysis reveals that the elements of social action are "residues" (habits of action), "derivations" (rationalizations) and utilities (maxima values, apparently a normative concept). There is no one explanation of social evolution; rather social equilibrium involves a mutual determining of all social forces. All social evolution, he concluded, is cyclical. His theory of the circulation of the *élite*, which explains social conflict as a struggle between the present aristocracy and the coming aristocracy, was credited with responsibility for the Fascist scheme of political and social ideas and action.

The dominant interest of American sociologists was psychological, and all their energies of classification went into attempts to work out acceptable groups of concepts which would explain the psychological basis of society and of the individual's actions in society. To this extent post-war sociology in the United States represented simply a refinement and elaboration of old aims.

The earliest concept, and the one which had the most enduring importance for sociology, was that of social forces. Small credited Ratzenhofer with originating it but Small made it over

and Ward popularized it. And the whole discussion of social forces was essentially an American preoccupation. In itself the concept of social forces is colorless but it was elaborated in a number of distinct and vivid forms. The most active controversy of the period centered in the doctrine of instincts. The fact that most sociologists, notably Giddings and Graham Wallas, used the doctrine of instinct so unquestioningly for a number of years after its introduction by McDougall in his *Social Psychology* (1908) indicates that it was regarded less as a startling theoretical innovation than as an effective formulation of accepted concepts. That McDougall should have reached this particular interpretation of the nature of social forces was a result of the increasing interest in biological explanations, and the reaction against the theory was in large part a phase of the environmentalist reaction against all extreme forms of biological determinism. It was in England that the first sign of opposition to the instinct doctrine appeared, in Morris Ginsberg's *The Psychology of Society* (1921). As the use of the hypothesis had been distinctly American it was natural that the attack upon the instinct doctrine should have been carried to a conclusion by American sociologists and social psychologists. Two adequate summaries of the controversy, C. C. Josey's *The Social Philosophy of Instincts* (1922) and L. L. Bernard's *Instinct, A Study in Social Psychology* (1926), both by opponents of the theory, brought to a conclusion the period of preoccupation with the instinct hypothesis and sociologists turned to other formulations of the nature of social forces.

Even before McDougall's enunciation of the instinct hypothesis, another group of concepts, that of social attitudes, wishes and habits, had already been used by a few sociologists and ultimately overshadowed the concept of instinct. Here the influence of William James with his emphasis on habits was of importance. As early as 1904, W. I. Thomas, at the St. Louis Congress of Arts and Sciences, stated that the important concepts of social psychology are those of attention, habit, sympathy, suggestion, attitudes, emotions; and in his *Source Book of Social Origins* (1909) he elaborated this idea. Cooley's discussion of the primary group and of the importance of communication for social development strengthened this general trend, while the influence of Freud's concept of the "wish" is easily discernible in the work of Thomas and Znaniecki in *The Polish Peasant*. The book be-

came so much of a classic that no American sociologist could afford to ignore its concepts, whether or not he used them. In an attempt to explain the process of social interaction represented by the Polish immigrants the authors developed the view that there are four fundamental wishes at the basis of all individual and social experience: the desire for new experience, for recognition, for mastery (later changed to response) and for security. In his own later works Thomas used the concept of attitude rather than wish. Park and Burgess also elaborated the attitude concept, and a large part of the activity of the whole Chicago school of sociologists was devoted to the discussion and classification of wishes and attitudes. A slightly different emphasis was given by Dewey to what is essentially the same concept. His various illustrations of the importance of mental activity rather than of mental structure played a part in leading many sociologists to a realization of the significance of attitudes rather than of hereditary impulses to action. In *Human Nature and Conduct* (1922) he attempted to elaborate a social psychology of habit and attitude. Analogous developments appeared in other countries, notably in the work of Hobhouse and the later work of Graham Wallas and von Wiese.

Another concept which had an increasing effect on the thought of all psychologists and sociologists was that of personality. James' work was here too of basic importance in the introduction of this concept, and Cooley was particularly influential in its dissemination. Among scholars of a wide variety of interests the idea of personality became the focus of study. In Germany there was the "critical personalism" of the philosopher-psychologist William Stern, who did a good deal of work in elaboration of his definition of the person as "unitas multiplex." The whole group of German phenomenologists was also interested in the concept, as was the psychoanalytic group of sociologists.

As the concept of personality developed it came dangerously near to the old group mind controversy, which in fact was not entirely closed. Floyd Allport contended that social psychology should discard the attempt to discuss groups or crowds and should use as a principle of explanation the concept of the individual in a social situation. He stood almost alone, however, not only in the United States but in most other countries, in his extreme opposition to the study of group behavior. Most other sociologists attempted to deal with the psychic aspects

of social groups, i.e. with leadership, tradition, fashion, imitation. This was perhaps a midway ground between the believers in a group mind theory and its extreme opponents. The work of Mary Follett exhibited a new realism in the handling of social forms, combined with a vivid appreciation of the importance of the group in determining an individual's thoughts. Her work was the best example of the theoretical foundation of the interest in functional groups.

In Germany there was still a certain interest in collective psychology. Theodor Geiger in *Die Masse und ihre Aktion* (1926) reviewed critically all the literature dealing with crowds and with collective action, especially Le Bon's theories, and Friedrich von Wieser in *Das Gesetz der Macht* (1926) analyzed leadership and collective action. It was in France, however, where the influence of Durkheim was still important, that the study of social psychology from the point of view of groups was most fully developed. While a number even of the followers of Durkheim questioned his emphasis on social factors, the majority of French sociologists were engaged in elaborating and further developing his idea of "collective representation." Publication of *L'Année sociologique* was renewed in February, 1925, under the direction of Marcel Mauss, a son-in-law as well as disciple and successor of Durkheim. The chief work of Mauss was in the field of primitive social organization. The clearest outcome of Durkheim's concept of "collective representation" was Maurice Halbwachs' *Les cadres sociaux de la mémoire* (1925) in which the main thesis was the contention that there exists a social framework of memory, a kind of collective memory, and that the individual consciousness is capable of recalling the past to the extent that it is placed in that framework and participates in that memory. René Hubert was influenced by a somewhat similar conception and Lucien Lévy-Bruhl developed in an extreme form the theory of the existence of a collective mentality.

A variety of specific interests emerged in sociological literature, such as the economic interest of Simiand and later of Bourgin and the anthropological interest of Lévy-Bruhl. In France the interest in religion was also important. Hubert and Mauss, for instance, made elaborate studies of the nature of sacrifice and Mauss developed a theory of magic. The work of Troeltsch in Germany on the social aspects of Christian dogmas exercised a widespread influence. Interesting sociological studies of art

appeared, particularly in France. The sociology of war was much less extensively developed after the war than it was before. On the other hand there were a number of studies of the sociology of revolution. Feminism received attention as a recent sociological force and the family continued to be an important subject of interest. After the appearance of Westermarck's *History of Human Marriage* (1891) emphasis shifted from a study of the instincts underlying the family to a consideration of the family as a social institution. At this point sociology very definitely came into contact with social work and psychiatry.

In the United States the work of Dewey, the spread of psychoanalytic doctrines, the mental testing movement as applied to adults and an interest in curricula for Americanization may be held jointly responsible for a series of books on educational sociology by Kirkpatrick, W. R. Smith, Robbins, Chancellor, Clow and Snedden. The American Sociological Society established a special section on educational sociology, while the faculty of New York University began in 1927 the publication of a *Journal of Educational Sociology*.

A more notable manifestation of the tendency of sociology to split into more or less distinct subdivisions was the appearance of the coordinate disciplines of rural sociology and urban sociology. Rural sociology was the first to develop separately. The movement derived force from agrarianism, particularly in European countries. In Germany von Wiese made important surveys of rural communities. The theoretical bases of rural sociology were the interest in regionalism and the interest in the community. Urban sociology was even more closely linked with regionalism. It was saturated with awareness of the predominantly urban character of western civilization. In the work of Patrick Geddes and Victor Branford urban sociology found definite form. Le Play himself was less interested in the city or the megalopolis than in geographic aspects of social organization. The study of non-territorial areas took its point of departure from Durkheim's study of totemic groups in Australia. The human ecologists combined an interest in territorial and in non-territorial areas.

This interest in regionalism was one of the main phases of the sociological interest in the community. Probably unconsciously the American sociologist took over Tönnies' distinction between community and society and concen-

trated attention on the basis of community life. A number of sociologists were chiefly interested in the economic phase of community life and organization; the rural sociologists were concerned with all kinds of helpful community organizations. This interest was definitely linked to the community organization movement of the social workers and to the whole city planning movement.

Among the special fields assiduously cultivated by sociology, immigration and other problems of population were the most important. The American restrictive immigration laws aroused an interest in the problem not only among American sociologists but among the French, Italian and German as well. For social science the discussions of immigration were important chiefly for the impetus they gave to a revival of interest in the process of assimilation and in the quantitative aspects of population.

The interest in assimilation was predominantly American and closely connected with the Americanization movement. The race hatreds precipitated by the war brought the subject more into the foreground of thought, although scientists were for the most part interested in the racial controversies through the approach to be had from the biology of heredity. This interest in heredity was closely linked with the eugenics movement, but from the point of view of the social sciences eugenics declined in importance after the war. Its literature was extensive but it was in the main a literature of popularization. The birth control movement, however, made important advances in both scientific and popular interest after the war. In 1916 the British National Council of Public Morals set up the National Birth Rate Commission, which has since then made an important series of investigations and reports. Considerable impetus was given to the movement by Marie Stopes in *Contraception, Its Theory, History and Practice* (1923).

This increasing popular interest in eugenics and birth control was added to the question of immigration as a further factor in the recrudescence of interest in the quantitative aspect of the population problem. For a number of years before the war whatever interest there was in population centered around problems of quality, in other words the eugenic interest. It is true that in both France and Germany there was a considerable amount of militaristic and nationalistic large family propaganda; and in the

United States Roosevelt made capital of Ross's phrase "race suicide." The populationist views of statesmen and moralists, however, excited little interest in scientific circles, nor was there much scientific interest in the problem of excessive population. But the widespread destruction of natural resources in the war led to new attempts to survey the quantity of resources available for an increasing population. The effect of the discussion was a revival of Malthusian fears of a future clouded by overpopulation and poverty with a consequent restlessness menacing to world peace.

A wealth of books dealing with the problem appeared during the decade, designed primarily for a popular audience. Sir George H. Knibbs, statistician for the Commonwealth of Australia, in his *Mathematical Theory of Population* (1917) made some striking calculations on the result of continuation of present rates of population increase. Keynes' *Economic Consequences of the Peace* (1920) stressed population pressure as one of the three or four greatest factors in world instability. The most striking single contribution to the literature was the formula for population growth of Pearl and Reed. In *The Balance of Births and Deaths* (vol. i, 1928) Robert Kuczynski made an important statistical study of the falling birth rate and his work indicated that western Europe is on the way to depopulation. The concept of the optimum, which emphasized social factors and the relativity of standards of living and possible population increase, was one of the most fruitful techniques introduced into discussions of the population problem. Carr-Saunders made use of the idea and A. B. Wolfe was one of its most enthusiastic proponents in America.

Criminology was one of the early collateral interests of the sociologist, but so long as it was dominated by the biological conceptions of Lombroso and his school the sociologists' interest was a derivative one, entering by way of penology. In 1913, however, Charles Goring wrote *The English Convict*, a work based on extensive statistical studies. This book operated to dispel faith in the thesis of a hereditary criminal type and prepared the way for a new interest in the mentality of the criminal. After the war criminology took on new life and new forms and was drawn closer to the other social studies. The rapprochement was achieved largely through psychiatry and abnormal psychology. The wide dissemination of psycho-analytic methods after the war exerted a pro-

found influence upon the tendency to explain the criminal in terms of psychiatry.

As a result of this changed emphasis criminology became more and more concerned with the understanding of the individual offender. Case study methods were borrowed from social work and psychiatry and an immense volume of psychiatric-criminological material accumulated. The pioneer work was that of William Healy in his *The Individual Delinquent* (1915). The study of the individual delinquent was closely linked to social work and to child welfare activities. It led to numerous studies of the juvenile courts, of which the best known was the work by Jane Addams and others, *The Child, the Clinic and the Court* (1925). The movement drew much material also from studies of family disorganization, as evidenced in Joanna Colcord's *Broken Homes* (1919) and Ernest R. Mowrer's *Family Disorganization* (1927).

While the prevailing tendencies in criminology were social and psychological, the biological tendency received new impetus from the study of mental tests and from endocrinology. The hereditary defective or the victim of glandular unbalance are types hardly less definite than the atavistic types of Lombroso. An excellent American example of this tendency was *The New Criminology* (1928) by Max G. Schlapp and E. H. Smith. The tendency was much stronger in Europe, however, than in the United States. In Spain *La criminalidad y las secreciones internas* (1927) by Mariano Ruiz-Funes was a formidable work which set forth all the biological explanations of criminal behavior, with chief emphasis on endocrine theories. Criminology after the war in Germany was largely criminobiology. The Austrian, Adolf Lenz, in his *Grundriss der Kriminalbiologie* (1927), attempted to create a whole biology of personality in terms which are reminiscent of Lombroso.

One of the most notable developments in the war and post-war periods was the progress toward professional standing of the group of workers attached to the administration of practical social services. "Applied sociology" had covered in a fashion the broad field formerly known as charities and corrections. It had operated on the principles of scientific inquiry uncovering, so far as it could, general rules which might arrive at practical application through legislation or through the administration of public or private charitable services. The charity organization societies of the nine-

teenth and early twentieth centuries represented a half-conscious reaction against the impersonal functioning of applied sociology and an impulse toward direct and continuous participation in the government and administration of social service. At the close of the pre-war period the professionalization of this form of activity was well under way and a systematic technique was developing. The traditional term "charities" gave way to "social work" which, however, covered a much wider field. The methods of social work penetrated into the fields of criminology, public health, education, labor administration, the administration of social insurance.

Social work addresses itself to the concrete case. It is no part of its province to map out the road for social legislation, to determine the direction of social progress. These general issues are committed to political science, sociology, economics. Social work seeks to translate the general social intent into rational application to the concrete case. Accordingly the central point in the social workers' system is occupied by the technique of social case work. It is a technique which must naturally exhibit great flexibility, since it serves such widely divergent interests as those of the broken family, the convalescent, the psychiatric patient. Such a technique had gradually evolved in the decade preceding the war. The publication in 1917 of Mary Richmond's *Social Diagnosis* supplied the social worker with a practical manual which remained the dominating work in the field, although a number of other excellent works appeared.

The immediate effect of the war on social work was vastly to increase the demand for trained social workers in connection with hospitals and convalescent camps, the relief of soldier's dependents and the administration of vast social programs such as Belgian relief during the war, and after the war Near East, Central European and Russian relief. There were, however, more subtle and profound forces affecting the position of the social worker in his relation both to social science and to public administration. The war had broken down the conception of an essentially laissez-faire state, standing aloof from the normal independent citizen and intervening only in the special instance by way of charities or correction. The stresses of the war years had broken down much of the social economic structure on which the fortunes of the normal independent citizen were based. It had become a primary obligation of the state to hold the tottering citizen on his feet—

not a charitable obligation, but one of sane public policy. The services of the social worker were required to determine where and in what form support should be extended. He ceased to be an exponent of the griefs of the needy, pleading for relief in semi-religious accents, and became instead the expert investigator or administrator attached to a rational public service. In European countries, where the destruction of traditional forms of thought had been most severe, this change in the relation of government to the handicapped was tacitly accepted, and social work, with all the technique of social case methods, was maintained by the state. In America the charitable tradition persisted and social work was maintained chiefly by private funds. Nevertheless, the collection of these funds was undertaken in many cities through community chests and was levied with almost the finality of taxation upon those who were able to pay.

While the advancement of social science is no avowed objective of social work, the immense volume of concrete data investigated by the social workers provided a sound basis for studies of purely scientific intent. The methods of social work were freely drawn upon not only by sociology and its dependent disciplines, but also by students of industrial and agrarian problems. The place of the social worker in the circle was one of steadily increasing importance.

VI. ECONOMICS. The key to the interpretation of economic thought during the war and the post-war decade is to be sought not in the prevailing intellectual mood but in the revolutionary changes in the economic situation and the inevitable if lagging readjustment of economic ideas. For earlier periods the interpretation of movements of economic thought in terms of economic institutions often appears somewhat strained. The world of scholarship is always in some measure autonomous, and when external conditions are virtually static, scholarship may yet exhibit remarkable advances, governed by forces evolving from within. For the period here under consideration the relation between institutional change and changes in the direction of thought is compelling, direct and obvious.

More than any other war in history the World War was predominantly economic in character. The application to military use of all the resources of modern science increased tremendously the voracity of the battle line. From month to month the requirements of arma-

ments, munitions and supplies increased at an accelerating rate, until severe strains began to appear at innumerable points in the industrial system. Before the war was over every country engaged had come to a full realization of the dependence of its armies upon the functioning of its industry. The "industrial front" was no longer a mere metaphor. Battles were being won or lost in the factories hundreds or thousands of miles away from the sound of the guns.

In consequence government and private industry were forced to work out a new relation, not easily definable in terms of the traditional political and economic theory. The government no longer stood apart from industry, practising paternalism or laissez-faire according to its established habits. Government and industry joined in close cooperation to advance the common national interest. There were indeed disputes as to prices, profits, taxes; these were resolved, however, not in terms of the rights of the individual as against the state, but in terms of the efficient functioning of the whole organism.

American experience in the cooperation of industry and government is perhaps more illuminating than any other, since America entered the war with a full realization of the new developments. As soon as war was seen to be inevitable the representatives of every important industry flocked to Washington to volunteer their services as "dollar-a-year-men." For its machinery of industrial control the government had the choice of the ablest key men in industry, men possessed of an amount of vital information on the functioning of industry such as government had never before had at its command.

Government and industrialists working in the closest harmony set about organizing and applying to war uses every available resource—labor, materials, credits, power. Questions of the distribution of rewards were in abeyance: if wages were advanced it was solely with a view to increasing productive efficiency; prices were fixed at levels calculated to bring out the fullest supplies; credits were distributed on the basis of national uses rather than relative profitability.

The first impulse upon the close of the war was fully to "demobilize" industry; to return to the private scramble for profits with the government keeping the ring. Gradually it came to be realized that the pre-war economic order could not be reestablished integrally. The problems of war debts, indemnities, markets, supplies of raw materials, employment, the distribution of credit, transcended the competence of the old

formulae. Government and business had to co-operate formally or informally in working out their solution.

Even in the United States, where the dis-integrating effects of the war were least in evidence, the tendency of government to co-operate with industry appeared in the official interest in standardization and the elimination of waste; in the sympathetic attitude toward consolidations that would have been highly suspect in the era of "trust busting"; in the repeated attempts to apply the resources of the Federal Reserve system to promote sound business development and to discourage waste and immoderate speculation. Even in Russia, where the old economic order had apparently been entirely destroyed, it was necessary for the communistic government to devise a "new economic policy," with a view to securing the cooperation of private interests at home and concessionary interests from abroad. Between these two extremes Germany, Czechoslovakia, Italy, and in a less degree England and France exhibited unmistakable tendencies toward a new integration of government and private business.

In the new institutional situation a host of practical problems emerged, requiring the services of the economist as expert. During the war economists and statisticians in every country were drawn into the services of the government to assist in the elaboration of fiscal policies, the administration of credit, transportation and power, the control of raw materials and the production process, the adjustment of industrial relations. Even before the war the employment of the economist as expert in industry had become common in Germany and not infrequent in America. The experience of the war enhanced the general estimation of expert economic services and greatly widened the scope of their practical application. In consequence the outlook of economists became semi-professional, with an emphasis upon practical solutions of concrete problems rather than the large generalizations of pure scholarship.

Hardly less significant in determining the development of economic thought was the special character of the problems of economic policy which loomed largest in popular interest. Inflation, the burden of taxation resulting from the colossal increase in public debts, indemnities, debts owed by one nation to another—all familiar problems in every respect but magnitude and therefore with an extensive traditional literature to draw upon—were discussed with

great acumen but as a rule without new insights of far reaching importance. Hardly any part of the voluminous literature on the economic consequences of the peace, Germany's capacity to pay, the possibility of the payment of inter-Allied debts, the incidence of taxation, the effects of inflation, took into serious consideration the change in the relation of government to industry or the emergent internationalism of the economic system. Although this literature was characterized by abundant information and sound sense, as an intellectual phenomenon it was reactionary, harking back to the epoch of John Stuart Mill and Cairnes.

The diversion of economic attention in the direction, on the one hand, of problems of practical economic administration and, on the other hand, of problems of public policy capable of a traditional solution left the science without the concentrated energy requisite for significant systematic formulations. No great treatise of economics appeared in this period. Criticism of the older theories was carried on persistently, but with no intense conviction as to the importance of the issues. Whereas the earlier criticism had derived most of its animus from serious concern over the justice or injustice of the economic system (Clark, Böhm-Bawerk, Hobson, Sombart, Veblen), the newer criticism was animated chiefly by concern over pure scientific canons and the felt need of bringing theoretical conclusions into line with the results of empirical inquiry. Thus the demand and supply curves constructed on rational principles by Marshall were confronted with altogether dissimilar curves that had been derived from actual market data by empirical methods; the concept of the "representative firm" was subjected to empirical tests and found wanting; the classifications of industries by the rate of return were proclaimed "empty economic boxes." Attempts were made to reforge the weapons provided by the older theory: moving equilibrium was proposed as an elaboration of and substitute for the concept of stable equilibrium, and the law of balanced returns was proposed as a substitute for that of increasing and diminishing returns. A great deal of work was done in various fields in an attempt to complicate and refine those theoretical categories which promised to be useful in dealing with descriptive and quantitative material. The results were hardly satisfactory. Eventually demands were made for a complete reformulation of theory so as to transform it into a true

organon for dealing with statistical generalizations.

The new trends in theory pointed in the direction of the institutional factors in economic life and to those types of schematization which assigned more importance to the effectiveness of these factors. In textbooks the historical relativity of the present order and the interplay of economic with other factors were emphasized at the expense of the refinements of marginalism; descriptive material was more abundant and occupied a more independent place than its merely illustrative uses would permit. Although attempts were made in some texts to dispense completely with the older theory—of these the most notable is the *Grundriss der Sozialökonomik*, the modern substitute for Schönberg's *Handbuch*—they by no means provided a substitute for old fashioned *Principles*; the best of them remained on the level of a sketchy delineation of the present system and of a compact historical and statistical description of its several parts.

In Germany there was a revival of theoretical interests best represented by the realistically tempered marginalism of Schumpeter. The vogue enjoyed by Cassel was at least partly due to his dispensing with the metaphysics of utility and value. Spann's universalism—a revival of the organismic romanticism of the early nineteenth century—abolished the individual and the concept of causality altogether. In France solidarism acquired a more respectable academic standing and a wider following. There was more emphasis in England, even among the older theorists, on the irrational character of human behavior and more interest in the way economic phenomena change as against the search for the causes of their existence. In the United States, in addition to a proposed displacement of the older theory by a system of empirically ascertained relations between economic variables, there was a great deal of discussion, most of it on the methodological level, of the application of modern psychology to economics, of the value of the institutional concept and of the functional as against the structural approach.

A distinct line of theoretical work, in the United States, grew out of the preoccupation with problems of public regulation of monopolies. The issues of monopoly charges and valuation had of course been vigorously discussed throughout the generation preceding the war, and a voluminous literature had been accumu-

lated. The newer analysis emphasized the fact that natural or legal monopolies possess features which increasingly characterize the rest of the economic system. Overhead costs attracted attention because they make regulation on the basis of the older theory impossible. The discovery of the ubiquitousness of this phenomenon led to conclusions which undermined the price theory based on assumptions of automatic adjustment of production to demand and of price to cost. It made essential a new theory not only for the uses of rate regulation but also for the intelligent comprehension of the realities of price determination in a market with an inelastic demand and a still less elastic supply. In this connection John R. Commons proposed a new approach not only to the question of monopoly but to the general economic problem. Economic life was to be viewed as a series of transactions entered into by going concerns guided in their activity by working rules, rather than as the movement of commodities according to a principle of scarcity effectuated by mechanistically conceived entrepreneurship.

The post-war period was unusually rich in experience in the field of currency, and the impetus to theoretical analysis was strong. Irving Fisher's symbolical formulation devised before the war seemed to make the quantity theory available for dealing with concrete situations involving a rapid increase in circulating medium and a rapid rise in prices. The equation of exchange was refashioned in a number of ways largely for the purpose of bringing to the fore the factors of importance in determining changes in the general price level. Of these bank credit occupied the center of interest. This led to a deliberate departure from the commodity theory of money and deprived the quantity theory of its causative, explanatory character. With the general recognition of the ability of organized banking to extend or contract the volume of circulating credit, the advocates of control and stabilization turned their attention to banking policy rather than to monetary policy; proponents of social reform began to inquire whether a rationalized distribution of credit, not only among producers but between producers and consumers, might not serve toward the rational development of industry and the elimination of overproduction and underconsumption and toward the regularization of employment.

Allied to the quantity theory was the purchasing power parity theory in foreign exchange.

This century old doctrine underwent in this period a series of modifications which endowed it with greater logical validity but deprived it of practical effectiveness. The regime of inconvertible paper money, for which this theory attempts to set up a parity, led also to certain adaptations in the theory of international trade. The analysis proceeded, however, almost entirely on the basis of the classical assumptions; it disregarded the important novel factor in the situation, the increased international movement of capital, with consequent deflection of rates of foreign exchange from commodity parity and ultimate revision of reciprocal demands and the comparative cost of commodities.

The developments in the field of economic history were notable. One effect of the violent changes in the whole economic system was to emphasize the need of systematic studies of change, not only in crisis periods but even more in the more manageable periods of gradual development. Pains-taking factual studies tended to displace large generalizations, and scholars in increasing numbers turned their attention to the possibility of applying rigorous statistical methods to historical inquiry. Most attention was paid to clearing up the origin of capitalism and to the industrial revolution. Sombart's revision of *Der moderne Kapitalismus* (1921-27) assigned greater importance to commerce in making possible the original accumulation of capital and reflected the influence of the times in putting more emphasis on the role of the state in the creation of the modern order. Tawney's *Religion and the Rise of Capitalism* found the spiritual preparation for the acquisitive order in the teachings of early Puritanism and in the later breakdown of those restraints which made economic virtues work out to the benefit of the community. Monographic research found the dominant forces of early modern capitalism in the commercial expansion of the seventeenth century and led to the conclusion that technological advance assumed its importance in industry only in the second quarter of the nineteenth century. The priority of England in the development of industrialism was challenged and the dark picture of "evils" of the industrial revolution was found to have been considerably overdrawn. The drift of the later monographic literature on American economic history was likewise in the direction of breaking up the rigidities of earlier formulae. It was enriched by compilations on the history of manufactures, agriculture and transportation,

by a number of sectional studies and histories of separate industries and railways, and finally by several histories of the labor movement stressing the importance of different factors in conditioning the development of this movement. While the achievements of theory and history during this period are interesting in detail, the more impressive achievements of the economic science of the time were closely connected with practical interests. Here the quantitative method was indispensable; it was applied so widely and with so great an application of intellectual energy as to create in many minds the impression that the future of economics lay wholly in the field of quantitative analysis.

The statistics available to the inquiring economist increased in this period enormously. Enumerations of the census type increased in frequency, in scope and intensity and in the reliability of results obtained. Governmental regulation and industrial reorganization on a national scale required a fairly accurate statistical description of major branches of economic activity, followed up by registration of current changes in the more important factors in the situation. The government and its numerous agencies, associations representing organized industries, the banks and investors' organizations, kept a close watch on economic developments, trying to measure, each for its own purposes, the tempo of economic activity in its multifarious manifestations. There was an extraordinary development of methods for dealing with quantitative material, for bringing it into a manageable shape which would admit of comparisons with the past and with related lines of economic activity. Index numbers, which were in wide use even before the war, were subjected to a theoretical analysis which systematized the various methods of compiling them and brought out their significance for the purposes in hand. Time series analysis was adopted from the natural sciences and employed to distinguish different types of changes in economic series. Although attempts to provide a probability basis for the use of refined mathematical techniques in economic statistics were unsuccessful, the validity of these methods for purposes of statistical description was generally granted.

The accumulation of statistical materials and tools was also stimulated by the study of industrial fluctuations. Even before the war it was fairly clear that the study of the business cycle was not an investigation of the "short run," disregarded by orthodox theory, nor an eco-

conomic dynamics building upon and supplementing the theory of statics, but an entirely different envisagement of the economic order, a scheme in which the normal was not a stable equilibrium achieved in the long run but a certain regularity and uniformity of change. The theories of this period, most of which stressed causes lying in the credit and currency mechanism or in under-consumption, were formulated in such a comprehensive way as to bring about a wider recognition of the fact that the real explanation lay in the disparity in the movement of various economic factors and in the accumulation of the effects of this disparity until a breaking point is reached. Mitchell's presentation of the subject, published in 1913, was increasingly recognized as a framework which permitted a quantitative study of separate elements in the situation, intended at once to ascertain the realities of their functioning and to bring out in increasing detail the part played by these elements in the congeries of strains and stresses which was called the business cycle. Attempts were made to trace out the secular movements and on this basis to construct the "natural history" of industry, in which the forces at work are the growth of population, frequency of inventions, building up of the capital structure. Extension of the investigations to include a longer period of time and the application of a more refined technique resulted in uncovering "major cycles," the rationale of which was traced by various authors to important changes in economic organization or to changing trends in gold production and gold values.

The luxuriant growth of quantitative economics constitutes perhaps the outstanding characteristic of this period. It was first developed in the United States and later widely imitated in other countries. Stimulated by the fundamental changes and by the wide amplitude and universality of cyclical swings in the years immediately following the war, a number of organizations were established which devoted themselves to the digesting of results of current observation and to the intensification in many directions of the study of correlations between economic variables. They were supported by government and business organizations because they offered the possibility of finding ways and means of mitigating the violence of fluctuations and of anticipating developments in the proximate future. The institutionalization of research was not confined to quantitative studies; it developed almost equally in the field of descrip-

tive studies. Such extensive fact gathering and condensation could not be conducted by a single individual, even with the unskilled assistance of seminar students.

The effect of the war and post-war developments on the labor problem was confusing in the extreme. At the outset the traditional assumption of diametrically opposing interests between labor and capital prevailed. In all the warring nations the first demand of government was merely a truce in the industrial struggle. Gradually it came to be recognized that something more than a truce was needed. The labor organization, like the corporation, could be employed as an instrument of national defense. Before America entered the war the labor organizations were already tacitly recognized in England and Germany as important factors in maintaining morale and stimulating production. America profited by European experience and from the outset recognized the official labor organizations on a parity with other directive forces in the economic system. For purposes of efficiency and control the extension of labor organization over parts of the field that had been hitherto non-union was permitted.

To stimulate the efforts of the worker, wages were advanced, sometimes merely as an offset, partial or complete, to the advancing cost of living, sometimes in more generous measure. What is essential is that the worker's standard of living came generally to be regarded as a matter of national concern. This attitude toward wages and employment was carried over into the post-war period in the European countries and the position of labor remained a dominant political concern. In America the first impulse of the smaller business concerns was to "deflate" wages but the great corporations, having become adjusted to the conception of operation in conformity with national interests, hesitated to take part in this deflation. Within a short period industry entered upon a phase of prosperity and the theory gained currency that this prosperity was due to the large spending power of a well paid working class.

In the development of tactics notable innovations were made by both capital and labor. Immediately after the war the employment of "industrial relations" experts was extremely common, and this implied a deliberate attempt on the part of the management to operate on a basis of understanding. Employees were encouraged to form shop committees and company unions for the regularization of industrial rela-

tions—often indeed as a prophylactic against unionization. Labor made numerous attempts to strengthen its position through the assumption of new functions such as banking and co-operative merchandising. In some instances remarkable results were achieved.

In labor theory the period yielded little that was new beyond the remarkable doctrines of the manifesto of the British Labour Party immediately after the war, which envisaged a state accepting as the definitive object of its policy the satisfactory supplying of the requirements of the democratic masses, and the fugitive literature in America occasioned by the launching of the abortive "Plumb Plan" for railway labor. There was, however, a rich monographic literature on various phases of labor legislation history and tactics.

Economic literature in general exhibited a lack of drive and direction. For this the explanation appears obvious. The world of economic fact was profoundly changed by the war. The old general concepts implicitly assumed in economic thinking—the state, private enterprise, the nation, internationalism, credit, capital—had taken on new meanings and time was wanting to weave the changed concepts into a harmonious structure of thought.

VII. POLITICAL SCIENCE. Traditional political science had already begun to exhibit signs of disintegration before the outbreak of the war. The neat concepts of the early twentieth century were subjected to severe criticism from the point of view of political realism. The "politics of power," which manifested itself with increasing frequency in the last decade before the war, had operated to weaken the position of the state as a moral entity. As an incarnation of force the state might be expected to vary in form and function with the resources at its command.

The immediate effect of the war was to dispel political questionings of every sort. In the nations at war the competence of the state became virtually coextensive with the national life. The economic system yielded up its independence in the name of military necessity; partisan differences were smoothed out in the interest of national unity; individual liberty was unceremoniously brushed aside. Professional political scientists, to be sure, maintained a formal consistency with peace time doctrines, but the concepts and formulae of the intellectual world at large were simplified to the last degree of absolutism.

With the progress of the war a host of new problems arose to disturb the absolutistic formulation. Within the nations at war the issues raised by conscientious objectors and by sporadic opposition to drastic labor control reopened the question of the unlimited character of sovereignty. In the neutral world criticism of a more general character awakened. On the widely accepted assumption that the war had been forced by militaristic influences operating within nations otherwise peaceful, a significant discussion arose as to the proper relation between the military and the civil authorities of the state. A striking comparison was drawn by Munroe Smith between German policy as dominated by Bismarck and as dominated, presumptively, by the military group surrounding Wilhelm III. The "imponderables" in policy, upon which Bismarck had laid so much stress, were now erected into an important limitation upon sovereign action. Most important of all, belligerent propaganda and neutral criticism were shaping up conceptions of war guilt which tacitly implied moral limitations upon the sovereign state and its responsibility to the "family of nations" or to mankind. The concept of a "superstate" was forcing itself upon popular political science, in spite of the rigidity of nationalistic preconceptions. In its extreme form this formula of the subordination of state to superstate went so far as to dispute the legitimacy of a government which was assumed to have flouted its responsibility to the family of nations. Woodrow Wilson's distinction between the German government, deserving to be crushed in war, and the German people, against whom the charge of guilt would not lie, was an instance directly in point. The tacit assumption of a superior international political entity appeared repeatedly in Wilson's pronouncements. Even the apparent harking back to a moralized nationalism in the formula "the self-determination of peoples" involved an internationalistic assumption. The right of self-determination rests not on natural rights, but on an assumed moral world order.

Discussion of an international political order became almost a universal preoccupation after the Peace Conference and the launching of the League of Nations. The discussion involved the position of the sovereign state within the new order; the relative weight of large and small nations in a working international organization; the canons of treaty making; questions pertaining to judicial action in international disputes;

the use of military force and economic pressure. Political scientists, philosophers, historians and other scholars participated in the discussion, but the main burden of it was borne by statesmen and political leaders. A wealth of literature appeared, but it would be hazardous to say that any single work stands out as an adequate treatment of this international trend of thought, although it was by far the most important in the political science of the period.

Parallel with the elaboration of the international order into an increasingly realistic entity, the attack upon the doctrine of the omniscient state was carried through with great critical energy. The most effective criticism was launched by the pluralists, led by Harold Laski. To the pluralists the state is simply one out of a number of associations to which the individual belongs and as such has no exceptional moral claim to be obeyed. The superiority of the state to other associations rests on its power to use coercion. The controversy over pluralism produced a flood of literature and resulted in a reiteration of the distinctions established before the war between various meanings of the term sovereignty. It led to an ethical defense of the superiority of the state by Elliott, who interpreted sovereignty as the assurance of the community of purpose that is the essence of the state. The same problem was approached historically by MacIver in *The Modern State* (1926). His conclusion was that the proper sphere of activity of the contemporary state is the dictation of such actions necessary for the good life of society as can be enforced, if necessary, by physical forces.

In Germany and Austria the question of state sovereignty was discussed chiefly in connection with the relation between state and law. The most novel development was that of the Kelsen school. As a neo-Kantian, Kelsen distinguished between *sein* and *sollen*, realms of existence and essence. Positive law is a closed system of postulates in the realm of essence and therefore does not recognize phenomena on the existential level. It deals not with acts of physical beings but with legal relations. The state, which is the source of law, is a juridical person, the subject of rights and duties. The *reine Rechtslehre* of Kelsen made it possible to conceive of sovereignty also as a legal relation, as the binding validity of the legal order, its internal coherence. To Fritz Sander, who differed slightly from Kelsen, the state was essentially no more than a particular system of legislative, administrative

and other procedures. Somewhat more realistic was Leonard Nelson, who believed that while force cannot make law it is necessary in order to make law effective in society. This is the purpose of the state. The power of the state, which is the supreme power, must, however, be a legal one, that is, must itself be limited by law. Still more realistic was Wolzendorff, to whom the state was a ruling force but a force of order, not of arbitrary compulsion. The state's function is to become the responsible and final guarantor of the law, to intervene only where free individual or associated action becomes insufficient. Finally Carl Schmitt, holding that political philosophy is nothing more than secularized theology, identified sovereignty with arbitrary power and found that it is exercised in the numerous situations which have not been foreseen by legal prescription.

Another development which marks this period was the concerted attack on the democratic form of government. The establishment by psychology of the extreme variation of mental ability led to the questioning of democracy on general grounds. A certain disillusionment with democracy was apparent even in the late works of James Bryce. Democracy was made the subject of a more realistic study in the countries which hitherto had not been under a democratic regime and was vigorously championed in spite of the paraphernalia of democracy in action, such as political machines, manipulated public opinion and lobbying. The influence of economic interests on political activity led to a demand for a substitution, or at least supplementation, of territorial representation by functional representation so that economic interests might have a direct share in the determining of governmental policies. Functional representation, it was asserted by the advocates of the council form of government in Russia and Germany, would provide the nearest approximation to direct democracy possible under modern conditions. In the Anglo-American world the problem of functional representation was a part of the larger controversy centering in pluralism and as such attracted considerable attention both on its own account and in connection with the coordination of organs of functional representation with organs of territorial representation.

Similarly parliamentarism was being seriously discredited. Carl Schmitt, following Smend, defended true parliamentarism on the ground that it offers publicity of discussion of all impor-

tant state measures in advance of decision. He asserted that latter day parliamentarism was degraded because vital decisions were taken not in plenary meetings of representative assemblies, but in small committees sitting secretly. Genuine parliamentarism, involving a nice balance between the legislature and executive, was distinguished by Redslob from monistic parliamentarism of the French type, where the sovereignty actually resides in the Chamber of Deputies and its committees.

The defense of dictatorship represented the obverse of the attack on democracy. Before the war G. Mosca had asserted that the mass of the people is incapable of self-government, that it is always managed by a minority and that a change in the form of government means merely the transfer of power from the hands of one minority to that of another. The defense of dictatorship received a peculiar twist in its application to the Russian situation. Lenin and Trotsky, adopting the syndicalist contention that the parliamentary state, with a venal press and corrupt parties, represents the dictatorship of the bourgeoisie, insisted, in opposition to Kautsky, that dictatorship of the proletariat, a recognized transition stage to the abolition of the state, cannot be achieved by the peaceful means of obtaining a parliamentary majority. Communist theorists assigned to the state a function far superior to any it ever had in socialist discussions. Communism, although still conceived in terms of economic and social organization, was to be brought about through an effective utilization of all the powers at the disposal of the state during the prolonged period of its domination by the vanguard of the class conscious proletariat.

These years after the war exhibited an increased attention to factors which condition international relations and the channels through which these factors become effective. The study of policies which result in the clash of national interests and of the methods by which these clashes can be avoided became a recognized division of political science. Most attention was given to the economic factors: the desire for the control of important sources of raw materials, of markets for goods and capital, of lines of communication, of overpopulation. Recognition of the predominantly economic character of imperialism led to a discussion of its essential relation to the existing economic order. Imperialism was considered by some the inevitable accompaniment of monopolistic, parasitic cap-

italism; by others the survival of feudalistic militarism grafted upon the modern economic order. Much attention was given to possible methods for abating the causes of disputes between nations and for the replacement of unregulated international competition by cooperation—international regulation of foreign investments, migration and the control of raw materials.

Of the institutions important in foreign policies most attention was paid to diplomacy and the press. It had long been recognized that the control of foreign relations was the weakest point in a democracy. The war produced a revulsion against secret treaties and a demand for "open agreements openly arrived at." The studies in this period, however, made it clear that while the first part of the formula is practicable and would lead to the cessation of leagues and alliances directed against third parties, public negotiation is not always practicable. It was also contended that in a democracy there is about as much control over foreign policy as over any other affairs of state and that the development of genuine control depends upon the creation of an informed and instructed public opinion.

Advances in the study of public administration were conditioned by the increasing dominance of the expert in the administrative machinery. Even before the war the relation between the permanent civil service and the cabinet responsible to parliament had been much debated, and in the post-war period the instability of cabinets and the growing group consciousness of civil servants made the problem more acute. The question of judicial review was also raised in a more compelling way after the war by the increase in administrative rule making; the underlying issue was whether the courts or the administrative commissions are the more flexible and more rational regulatory agencies. Parallel with the interest in the distribution of control was the concern with efficiency of functioning. Methods developed by industrial psychology for testing the fitness of the job holder were adapted to the usage of the civil service and measures were devised for testing the efficiency of performance of various governmental units. New schemes of administrative organization were worked out with an eye to eliminating waste due to duplication and overlapping and the general clumsiness of structure. The work of the Institute of Government Research in the United States and of the Institute of

Public Administration in England were of particular interest in this field.

In the United States much attention was given to the continuing tendency toward centralization of authority in the federal government; to the installation of the budget system by the federal and many state governments; to the increase in number and the extension of competence of administrative commissions; to experiments in the field of municipal government and later in rural local government. In the British Empire interest was centered on the devolution of powers resulting from the tendency toward independence of the self-governing dominions. Much was written in Germany in connection with the new constitution. Attention centered especially on the relation between the Reich and the constituent states (*Länder*), on the position of the new advisory economic councils in the general administrative system and finally on the question of judicial review of legislative enactments. In Italy the focus of interest was the reconstruction of the entire state apparatus from the top down. The chief problem occupying Russian political scientists was the regularization of governmental processes as a means of escaping the crude and arbitrary dominance of revolutionary intuition.

Political science was markedly influenced in this period by developments in related disciplines. The substitution of sociological for legalistic conceptions of the state made it imperative to redefine what is specifically political. An easy solution was found by some in reviving the notion that the characteristic attribute of the state is its power of physical coercion. Fundamentally related to this was the view held by others that the state is the resultant of attitudes engendered by the possibility of organized conflict. Political science so defined could still retain its identity even if its scope were extended to include the study not only of governmental agencies but also of the numerous underlying groups of organized interests.

Social psychology contributed to politics perhaps even more than sociology. In the preceding period Graham Wallas had stressed the importance of a human nature approach to political processes and Michels had pointed out the danger of democracy degenerating into an oligarchy because of the unscrupulousness of its party leadership. While work along these lines continued, new leads were uncovered. Mary Follott pointed to the vitalizing and integrating role played by conflict in the social process,

analyzed the nature of group organization in terms of a somewhat modified behavioristic psychology and indicated the significance of the group in a democratic state. Walter Lippmann gave an interpretation of political behavior which emphasized the importance of stereotypes in the formation of public opinion. An impetus was thus given to numerous studies of the structure and functioning of political parties, of the formation and manipulation of public opinion, of revolutions and revolutionary movements.

The application of psychology to political science was carried farthest by Floyd Allport. In renouncing the "institutional fallacy," by which institutional attitudes of individuals are abstracted and set up as entities in themselves, he claimed the whole field of the social sciences for the study of behavior attitudes. This behavioristic approach naturally led to attempts to reduce politics to statistical expression, such, for instance, as the correlation of voting with a number of factors which are supposed to influence it. Measurement and precise description were used also in the political survey, which developed first in urban communities in the United States and was later employed in the field of operation of state and federal government; it was also carried on in England on a large scale. The object of the political survey was to describe governmental machinery in operation in relation to a precisely specified social milieu.

Another development on the margin of political science was the increasing interest in political geography. This was inevitable, since the new map of Europe was settled partly with reference to the establishment of natural frontiers and ethnic homogeneity. In 1924 the magazine *Geopolitik* was founded in Germany by Karl Haushofer, and still earlier an attempt was made by Rudolf Kjellén in Sweden to incorporate political geography into descriptive political science.

If it is true that political science begins where public law leaves off, this period was the first, both for Anglo-Saxon countries and the continent, in which the science came into its own. In spite of the multiplication of written constitutions and of regulatory laws and rules, the drift of thought was distinctly away from the study of structure to a consideration of the realities of functioning. Consequently the dicta of the science became less definite and its dependence upon related disciplines much closer; for the

same reason it was also impregnated with a new vitality and a greater responsiveness to practical needs.

VIII. LAW. The transformation of a system of legal thought in which the will of the state was the central fact into one in which the development of the individual was the primary concern, was the chief accomplishment of juristic activity after the war. This transformation, which had been definitely begun in America just before the war and considerably earlier in Germany, is generally abbreviated as the change from an analytical to a sociological jurisprudence. In terms of this change the varied activities after the war in juristic thought, legal education, social legislation, codification and the reorganization of judicial machinery take on a considerable community of meaning. As a sequel to this change there came a new emphasis and a new perspective in the study of law which lifted it out of its former position as an adjunct to political theory and made of it a complex and ramifying social study.

The opening of the war period found analytical jurisprudence yielding ground in every important juristic system to an invading body of thought which, because of peculiar intellectual traditions and legal-political schemes, was of a different composition in each country. In Germany the decisive influence of Stammler and Ehrlich, operating in a code country, emphasized the need for a dynamic jurisprudence which would continue to adapt a rigid system of law to the changing needs of each period. In France, where the metaphysical tradition had been dominant, distinct trends could be traced toward a revival of natural law, the energetic study of comparative law and the extremist movement for "free law." In England, which had since Hobbes been most intimately allied with the analytical strain of thought, the analytical tradition was most tenacious, giving way only in the historical approaches of Maitland and Vinogradoff. In America a derivative analytical jurisprudence held sway until the vigorous writings of Roscoe Pound and the opinions of Mr. Justice Holmes began to make serious inroads upon it, the first in a direction closely allied to Stammler's sociological school, the latter in the broad spirit of a humanized individualism.

The war itself had an appreciable, although not a determining, effect upon subsequent juristic developments. It produced a prolific literature of international law, in which the

fundamental concepts of sovereignty, nationality and neutrality were reexamined. Considerable creative activity went into the organization of the judicial machinery and the analysis of the juristic theories that were to govern the outlawry of war and the effective arbitration of disputes. The new constitutions of the post-war European states brought with them the problems of adjusting theories of public law to a conception of powers derived from a written constitution, and stimulated a revival of analytical jurisprudence; an impulse in the same direction came from the quest of stability in an era of rapid change. The unprecedented activity in constitution making also presented an opportunity for a fresh examination by continental jurists of Anglo-American legal institutions, particularly the American doctrine of judicial review of legislative acts, which the Reichsgericht in Germany adopted. In England the war, among other factors, gave an impulse to the process of transforming empire into commonwealth which was accompanied by an attempt to clarify the status and legal relations of the constituent political units.

But these direct results of the war were the incidental rather than the essential lines of advance along which legal theory developed. The principal single force behind this development was the actual character and functioning of legal institutions in this period. Just as the primary concern of law in the Middle Ages was the proper ordering of one's religious life, and in the early modern period the building up of effective legal control by the central government, so it came in this period to be the smooth dispatch of intricate business relations, the maintenance of property rights, the protection of the individual in large and impersonal communities. The refinements of the corporate organization of the business unit, the fluidity of credit transactions, the complexities of financial organization illustrate the demands that business made on legal machinery and concepts. The history of the relations of government and public utilities in the American legal situation is an indication of the concern of American constitutional law with property rights; and the frequency of crime commissions testifies to the importance of the problem of criminal law and administration in a large city. Juristic concepts, legal education and judicial machinery had to be refashioned to meet these compelling demands with some degree of adequacy, and that process subsumed most of juristic attention after the war.

In this transformation the governing intellectual principle was that of pragmatism. This was especially true of legal development in America where Mr. Justice Holmes, in his famous remark that "the life of the law is not logic but experience," not only expressed a personal conviction but caught the increasingly characteristic note of American jurisprudence. This tendency had already shown itself in England before the war in the work of Pollock and Maitland, who had qualified Austin to the extent of defining law as "the sum of the rules administered by courts of justice"; a realistic examination showed that under a common law system the center of gravity was not the single creative act of the legislator but the continuous series of creative interpretations by the judge in the daily stress of court business. But the most insistent application of this pragmatic attitude was found in America, where the moving power behind legal change was the Supreme Court and where not only the interpretation but even the validity under the constitution of certain crucial laws were not known until the Supreme Court had passed on a case involving them. The attitude is illustrated in such varied features of the American legal landscape as the use of the case system in legal education; the conception of law as an entity which does not at any moment exist except in the probability of its application to the specific set of facts involved in the next case and, as a consequence, the opposition to such judicial machinery as advisory opinions on the ground that they postulate the existence of a legal principle abstracted from a particular set of facts; the consciousness of the evasive and indefinable character of legal concepts, such as due process, which was revealed in the writing and teaching of diverse but representative American legal scholars like Cook, Frankfurter, Powell and Hamilton; the increasing practise of adjudicating a case not by the method of abstract logic but in the context of social arrangements that give it significance and, as a result, the transformation of the legal brief and sometimes the judicial opinion into an economic or sociological treatise.

The vigorous and able thinking that characterized the opinions of the American Supreme Court was one of the outstanding juristic achievements of the period. Although the form and purpose of an opinion are completely alien to the deliberate grappling with jural concepts to be found in the treatises of system builders like Austin, Kohler, Stammler or Géný, these opinions may be said to have added to the recognized

schools of jurisprudence a characteristically American accession. Their principal ingredients, with some admixture of ethical and historical points of view, were the traditional American stress on individualism and the desire of the sociological jurist to apply law in the context of a changing society. Opinions of this kind were particularly characteristic of Mr. Justice Holmes and Mr. Justice Brandeis, although in strikingly diverse proportions. Two such apparently antithetical attitudes would seem strange partners, and it is true that Mr. Justice Holmes when, at times, he found the two in conflict rendered exclusive fealty to the first and Mr. Justice Brandeis to the second. But in their judicial opinions and also in the main trend of the court's decisions during this period there was evidenced a remarkable attempt to weigh the conflicting demands of social policy and individual values. The central problem of law became that of so controlling the growth of legal institutions as to make for the best development of the individual in society.

To make such an attempt with even a partial degree of success was a heroic procedure. For a body such as the Supreme Court, so situated in the American political scheme that its decisions could affect the future course of social legislation or deflect prosperity from one channel of business or section of the country to another, the process of decision became an adventure in statesmanship. American constitutional law, although in the controversy over prohibition and civil liberties it continued its traditional preoccupation with the Bill of Rights, in dealing with the more vital questions became increasingly absorbed with the legal bases of the economic and social system of the most highly industrialized country in the world. How perilous a responsibility this imposed upon the judiciary was stated with engaging clarity by Mr. Justice Cardozo in *The Nature of the Judicial Process* (1922).

The wide acquaintance with continental law and juristic literature evidenced in this book is representative also of the movement toward what may be termed a "reception" of European legal thought. Pound, in support of his plea for a sociological jurisprudence, and Wigmore, with a primary interest in comparative law, introduced American scholars to the significance and content of the principal trends in European jurisprudence. The *Continental Legal History Series* and the *Modern Legal Philosophy Series* did much to attenuate American legal provin-

cialism. But such an interest cannot with truth be said to have taken deep root in America, and the increased interest in Anglo-American law which scholars on the continent began to evince was sporadic and undetermined. In another direction a controversy which had started with *éclat* and promised to have revolutionary effects burned itself out in an uncongenial atmosphere. The furor with which Wesley Hohfeld's criticism of the existing terminology of jural relations was received, and the degree to which his scheme for clarifying and classifying them dominated for a short period the teaching at the Yale Law School, were perhaps an indication of a current belief that more than of social consciences judges stood in need of sharper wits. After a heated controversy between Walter Wheeler Cook, the principal Hohfeldian exponent, and Albert Kocourek, who while sharing Hohfeld's interest in jural analysis set up a rival scheme, the issue cooled. It was probably less suited to the case law system in America than it might have been to the civil law system on the continent, where the necessity for formulating law constantly on the basis of a written text made an underlying scheme of jural relations desirable. Its principal significance became finally its influence on Cook who, adding to it the findings of the New Physics and the New Logic, broadened it into an investigation of the scientific method in law; and on Commons, who used an adaptation of the Hohfeldian system in his *Legal Foundations of Capitalism* (1924).

Taking issue forcefully with the categorizing of the legal analysts, the sociological school, with adherents in every country and with Stammler and Pound as its principal leaders, established the dominating trend in juristic thought. It spent much of its early force in a frontal attack upon the intrenchments of "mechanical" jurisprudence, in the violence of which it sometimes exposed itself to attack on account of the extreme formulation of its stand. In its more constructive phases it revolutionized the study of law, leaving its most appreciable mark on legal education, research and reform. In America it was connected with every important movement in these fields.

In legal education the case method reached the apogee of its influence in this period, and there were even rumblings of a revolt against it. This revolt did not advocate a reversion to the textbook method but aimed at making the study of a case merely a point of departure for

an excursion into the social and philosophical problems of which it formed the end product. This represented, although in an extreme form, a tendency which the innovators in legal education manifested throughout the period—that of paying increasingly less attention to the professional aspects of legal education and of using it to transform law into a social study. The reorganization of the curriculum on a functional basis, which absorbed much of the administrative energies of the principal law schools, was built on a fundamentally sociological conception of the functional role of legal rules and institutions in society. When the disparity between the aims of professional legal education and the social study of law became increasingly clear, the two activities were differentiated and the latter was organized definitely as research, sometimes with a separate staff and predominantly by the method of group collaboration.

Whatever the degree of success with which the fruits of legal research justified its pretensions, there can be little doubt that it was a valuable auxiliary in the movements for clarification of legal rules and overhauling of judicial machinery. The work of the American Law Institute, the revision of the Code of Civil Procedure in Germany, the reform of the judicial organization in France and Ferri's unsuccessful attempt at a thoroughgoing reform of the Penal Code in Italy were inspired and conducted by legal scholars in the light of what they considered the latest research. The early hope of Pound that legal scholarship might prove eventually effective in social engineering found ample realization when the jurist was called in, as the engineer might have been, for a survey of a troublesome problem. With a note of authority the jurist as expert suggested remedies in the case of the breakdown of the machinery of criminal administration (Cleveland Crime Survey); the congestion of the nation's business in the Supreme Court (Frankfurter and Landis, *The Business of the Supreme Court*, 1927); the unnecessary litigation of commercial disagreements (the movement for commercial arbitration); the non-enforcement of the prohibition laws (President Hoover's advisory committee on law enforcement).

The obvious social context of every legal problem and the building up of a system of legal research and study to deal with the problem adequately in this context served as the connecting links between law and what lawyers began to call "the other social sciences." In these

interrelationships lay the claim of law to be considered a social study. In the investigation of the origin and development of legal institutions and concepts only a beginning was made in this period, but enough to show that here the genetic method was successful in revealing "the dead hand of the past" and the devious and amazing carry-over of old ideas to deal with new situations. No more fertile phase of intellectual history was to be found in any of the social sciences. The study of non-political groups and associations, as they had been clarified in sociology, yielded, in the pluralistic theories of Duguit, Krabbe and Laski, a revolutionary change in the political-legal concept of the state, and had correspondingly important consequences for the theory of the nature of law. The studies by lawyers and economists of the legal foundations and the legal scaffolding of the two principal institutions that have emerged into dominance in modern society—property and contract—contained much dynamite for accepted attitudes in both law and economics. Social work carried its activities over into the field of law, and considerable interest was stirred up over the small claims court, legal aid and the juvenile court. Anthropologists (Lowie, *Primitive Society*, 1920; Malinowski, *Crime and Custom in Savage Society*, 1926) grappled with the problem of legal organization in the primitive community and clarified the functional relationship between the legal system and the social organization. Psychology with its revolutionary though somewhat unstable revaluations undermined the substructure on which the elaborate system of legal evidence had been built. All along the frontiers of law there was a good deal of stir. If there was too much faith in the results of group research and in the genuine synthesis that might be effected by the juxtaposition of law with another social study, it was merely a sign that one of the oldest of organized studies was passing through a new youthful phase.

IX. HISTORY. In a group of social studies prolific in innovation the peculiar propriety which seems to stamp the adjective in the phrase "the new history" is of considerable significance. It presents the paradox that the study which has from within itself generated the least of actual novelty offers the appearance of the most radical transformation. And it points in partial explanation to an articulateness and a militancy on the part of the spokesmen for

history that transcend the revivalist spirit of the other social sciences.

The movement for a new history, although in the swing of it there was an accelerated swiftness after the first decade of the century, did not come with entire suddenness. Behind it there was in each country an evolution of historical writing in which sporadic beginnings of the later tendencies can be distinctly traced. In Germany, side by side with the efforts toward the crystallization of history into an exact science, there may be discerned a movement for the broadening and humanizing of historical writing. From the *Kulturgeschichte* of the late eighteenth century this tendency can be traced through the nationalistic and idealistic trends of the nineteenth and the methodological clash that centered around Lamprecht. Defeated and deflected until the war, the impulses behind cultural history found renewed expression in the general revulsion against *Macht-politik* that followed the German war experience. The dominant historical interest therefore became *Geistesgeschichte*, a peculiarly German variant of the new history, a transcendental study of a culture with the intention of finding the spiritual realities underlying political and economic forms. In France an unusual activity during the nineteenth century in the history of ideas and in archaeology and geography was the significant precursor of Henri Berr's declaration of the aims of synthetic history in his *La synthèse en histoire* (1911). The work of Berr and his associates on the *Revue de synthèse historique* was finally productive of a conception of world history which they proceeded to apply in *L'évolution de l'humanité*, a series impressive for the range of human activity it treats and the important contemporary institutions whose history it develops, as well as for its emphasis on what was formerly known as pre-history. In England, where the historical tradition had always been so dominantly one of narrative grace and psychological penetration, unaided by any intimate connection with the social sciences, and where therefore Buckle had been a phenomenon and Green an episode, it was not to be expected that the new history would find fertile soil. The work of F. S. Marvin, with his conception of the "living past" as a dynamic factor in the present, and his conviction of a unity which underlies the varied manifestations of a period, represented, however, a break with the tradition. That it represented also a genuine change in the demands of readers is shown by

the success of H. G. Wells' brilliant and daring survey of world history, *The Outline of History*, which seems largely to have been influenced by Marvin's ideas.

It was in America, however, that the ideals of the new history received their most articulate expression. McMaster's emphasis on the life of the common man, like Green's work in England, had represented a break with the tradition. And when F. J. Turner, in the tradition of Buckle, advanced an anthropogeographical theory of the influence of the frontier, the reception it received proved not alone the fertility of the idea but even more the poverty of American historians in interpretative leads. But the principal stir in the American historical movement did not come until just before the war, and then, somewhat strangely, from scholars in the field of European history. The prime agitator was James Harvey Robinson who at Pennsylvania and later at Columbia effected an atmosphere of vitality such as American historiography had not experienced since the return of American students from the seminars of German scientific history in the eighties. His book, *The New History* (1912), which represented also the credo of the group associated with him, called upon historical writing to encompass the entire breadth of man's activities and to treat the past dynamically as the mold from which the present has been cast. For such an intent the field of European history was especially adapted. It offered rich material for what Robinson was aiming at—intellectual history, the portrayal of the succession of widespread intellectual attitudes in Europe at successive periods and their survival in the contemporary consciousness of the western world. Despite wide divergence of emphasis on other scores, a common interest in this theme gave an essential similarity of temper to the work of Haskins, Schevill, Shepherd, Hayes, Cheyney and Thompson.

The new historical approach, once it had penetrated American scholarship, was applied with the greatest success to the study of the American past. The *Chronicles of America* (1918-21), edited by Allen Johnson in fifty volumes, and containing significant work by Becker, Dodd and Andrews, represented a considerable degree of success in absorbing the interpretative leads deriving from the other social sciences. Schlesinger's *New Viewpoints in American History* (1922) may be taken as a summary of the changes in the historian's horizon which the lapse of a decade since the publi-

cation of Robinson's book had produced. In the decade that followed Schlesinger's work this changing outlook found even more prolific expression. James Truslow Adams in a three volume survey of the sectional history of New England dealt in the approved manner of synthetic history with the important phases of New England life and thought. Lewis Mumford in *Sticks and Stones* (1924) and *The Golden Day* (1926) sketched in broad strokes the main outlines of American intellectual history, as revealed through American architecture, literature and philosophy. An impressive survey of the entire range of American thought, in which the standards used in evaluating particular personalities were those of the social theorist rather than the literary critic, was contained in Vernon Parrington's *Main Currents in American Thought* (1927-). Charles and Mary Beard, in their *The Rise of American Civilization* (1927), capped their previous monographs on the economic aspects of American history by sketching deftly and brilliantly the forces that went into the building up of a culture. *A History of American Life*, planned in twelve volumes and edited by A. M. Schlesinger and D. R. Fox, is "social history" in that it places its emphasis on the daily life of the undistinguished masses rather than on the careers of the famous or talented.

This swing of the movement for a new history indicates an inescapable contagion in the idea; varying national traditions and varying academic groups responded to it in their own fashions. An individuality might perhaps be given to each of these different manifestations, but a sharp distinction between them would define them out of recognition. Beneath the variety of forms there was a community of viewpoint which showed them to be merely variants of a central idea. The apparently common element was rebellion against the narrowness of the historical outlook, and the meagerness of the sources from which historians were deriving their ideas. To say that the program of the new history called for an extension of the boundaries that hedged history about is too mild; it was rather a removal of all boundaries. The agitators for a new history refused, like Terence, to admit that anything human was alien to them. Starting with the postulate that history was everything that could be known or found about the past, they were by a relentless logic forced into an unenviable position of omniscience and omniscience. Refusing to admit that historiography took its

point of departure from written records, they had to insist that it took all time for its sphere and so were compelled to become amateur archaeologists, anthropologists, cosmologists. Once they denied that political history was the peculiar field of the historian they could find no stopping point until they had added every other sphere of social activity; and they were compelled to become amateur economists, sociologists and literary critics, as they had once been statesmen, generals and theologians. They evolved thus a program which called upon the historian to encompass the whole of life, to portray the moving stream of cultural development.

To support this changed attitude there was an influx of new factual material which, whether it preceded or followed the interpretative leads, was certainly indispensable in establishing the new history on a firm basis. The controversy over war guilt unloosed a flood of memoirs and opened the archives of several governments. The revolutions in Russia and Germany converted the opening of the archives in those countries into gestures for the renunciation of the old autocratic regimes. Diplomatic history and the realities of statecraft behind diplomacy dominated for a time the historical scene. New research techniques, more adequate library facilities for the scholar, the increase of publications in monograph and periodical form, the multiplication of guides and bibliographies, the historical researches carried on in the wake of the development of historical interests in the other social sciences—all of these combined to enrich the materials with which history worked.

But the principal impulse in this direction came from archaeological advance. Troy, Mycenae, Knossos and Luxor had been for an earlier generation the symbols of an antiquity beyond that of written records which nevertheless was considered within the scope of history; and historians had been stirred by the archaeologist's dream of reconstructing a civilization with the aid of a few shards and urns and deductive logic. But the unearthing of buried cities proceeded at a pace and on a scale that made the old term "classical antiquities" a bit antiquated and, when historians began to show interest in discoveries which did not involve the gleaming columns of temples but flints and iron implements, it was evident that they had ceased to regard archaeology as principally an adjunct to classical studies but valued it for the shift in perspective that it compelled. In the new time

perspective antiquity was more closely associated with the early geologic epochs than it was with the invasion of the Dorians or the founding of Rome; and the term pre-history lost any meaning it may originally have had. Similarly the ethnological literature, always ignored by historians because it dealt with peoples who had not entered into the stream of western culture, became something that had to be taken account of. If the western peoples were only an episode in the sweep of world history, then they were also only a section of the geographical span of culture. The Bushman and the Melanesian as well as the Frenchman and the Englishman became part of the historian's subject matter, and the accumulated material on their history became part of the storehouse of facts on which the historian depended.

For historians of the established faith, who believed that the line of historical advance lay in the increasing accumulation of facts, this influx of material from archaeology and anthropology, from archives and business records and population and wage statistics, seemed a sound and sufficient basis for the expansion of history. Some of them were even beguiled by this into a hesitating acceptance of the tenets of the "new history." But to historians possessed of less faith in the unaided sufficiency of "facts" the line of advance lay rather in the possibility of fresh interpretation of such facts as were at any time available. In their view the facts of history—its material—lay all around for potential mining, embedded in the past, waiting only the impulse to explore that particular vein. And—such were the devious ways of historical advance—such an impulse could come only from the awakening of new intellectual curiosities whether arising spontaneously in the mind of the historian or relayed to him from outside, or from the insistence of new problems demanding to be traced back into the past. The amazing consciousness which the generation possessed of its dominant contemporary institutions, ideas and problems sent historians back in the most fruitful of their researches in a quest for the origin and development of these institutions and ideas.

The interpretation of historic facts that the historian of the old accredited faiths recognized as valid was the appraisal of their authenticity. All the energies of the "scientific" school of history were directed toward the building up of a critical body of rules of evidence, much like the rules of evidence in courts of law. Of course

all rules of evidence, legal and historical, since they concern themselves with the ascertainment through the medium of human testimony of the authenticity of certain events, become antiquated when the psychological surmises as to the degree to which a man's statement can be believed become antiquated. The old psychology of historical evidence, like that of legal evidence, was somewhat over-simple in its assumptions and was disintegrating slowly before the recognition of the intricacies of the new psychological viewpoints.

The problem of historical evidence agitated the scientific historian because rigorous rules encased him in an *aes triplex* in his quest for certainty and objectivity. The same problem furnished for some of the new historians the starting point for an interesting revolution in attitude. Finding in their studies what was not entirely apparent before the newer psychological developments—that different men will see exactly the same event and will record quite different versions—they were led to a suspicion of the science of history. It was impressed on them, as it could not have been impressed on any others in the social studies except the psychologists, that men's minds move covertly toward devious and surprising conclusions and that the narrative of two historians of the storming of the Bastille may, like the account of two eyewitnesses, be almost completely antithetical because colored by their preconceptions. The propaganda activities of historians during the World War served to bring out even more clearly the nature of the historiographic process. There arose therefore among some historians a significant awareness of the preconceptions with which they approached the raw material of history.

Such a development was of course fatal to the long established self-sufficiency of historians—their independence of any surrounding social disciplines. The buttress of this self-sufficiency had always been the belief that the facts spoke for themselves. But when the same fact was two different things to two different persons it was obvious that if it spoke for itself it did so in a language that could be variously translated. Everything then broke down. Historians saw that even in the past when history had remained aloof from any alliance with the social sciences, it had used interpretations but had not been conscious of them. The interpretative equipment of a political historian had been mainly an individual psychology involving the ambition, cruelty and effeminacy of emperors, a

crude social psychology built around the demagogue and the mob, and a repertory of political ideals such as liberty and religious tolerance. Historians began to feel that if interpretative leads were inevitable it was better to apply them deliberately rather than in haphazard fashion, and to draw them from the entire range of the social sciences rather than merely from political theory.

This connection between the new history and the social sciences is one that was considerably stressed in commentaries on the new history. It found its most explicit and insistent expression in the writings of H. E. Barnes (*The New History and the Social Studies*, 1925; *History and Social Intelligence*, 1926). The connection was a genuine and significant one. The development of the older social sciences—politics, economics, jurisprudence, sociology—to a place where their formulations became well established, and the rise of such new disciplines as cultural anthropology, human geography and social biology had considerable relevance for history; they emphasized the richness of the material to be treated in the non-political aspects of life and they made it impossible for the historian to neglect the interpretative leads they offered. Each of these social sciences, before historians became fully aware of its significance, had built up a historical literature of its own. The assimilation of these historical treatments of whole sections of the life of society which had formerly been somewhat alien to the province of history was in itself an educative process of considerable consequence for the historian.

A summary review of the interpretative leads which history borrowed from the social sciences would show that social biologists, through the Darwinian hypothesis, introduced the concept of evolution, and the race theorists the rather risky interpretation of national development in terms of racial endowment; that the anthropologists thoroughly imbued the historian with the concept of culture and directed him to the study of the totality of the life of the community; that the anthropologists and archaeologists radically changed his perspective in time and space; that the geographers gave him an environmentalist interpretation running in terms of the inexorable elements which constitute the physical landscape and the complex accessions which constitute the cultural landscape; that the psychologists affected his con-

ception of the inner springs of motive and emotion underlying the actions of the "men who made history"; that the collectivist psychologists drew his attention to the fundamental role of the masses and the common man in history; that the economists pointed out the dominance of the maintenance problem in community life; that the political scientists showed the realities behind governmental structures and the propulsive force of such political aspirations as those for nationalism and later for internationalism; that the sociologists worked out a set of conceptions of the realities of group life which enabled the historian to separate the formerly undifferentiated "nation" or "public" into its various racial, economic and interest groups and to trace the entrance and role of each in the life of the community.

When history is thus seen as an omnivorous borrower it becomes clear that the pother about making it keep pace with the social sciences was a matter of primarily educational concern. Although there are other social studies which perform a synthesizing function they do so rather for the social scientist than for the layman. History has always been a common carrier, the accredited vehicle for transmitting to the lay reader as much of the philosophy of society as historical scholarship is able to absorb. Being primarily a narrative of the past it is, from the combination of literary finish and scholarly substance of which it is susceptible, pleasanter to read and easier to teach than the more analytical social sciences such as economics and sociology. There had always been a lag between the contemporary state of the "moral sciences" and their reflection in historical writing, but as long as the connection between the two was not clearly seen no great stir was raised. The consciousness of this connection, when it came, was converted into a considerable *malaise* when the social sciences developed so rapidly as to make the gap between them and history a precipitous chasm. For it seemed disastrous to those historians who were conscious of the educational responsibilities of their craft that these duties should be so grossly shirked. To them the "new history" offered the opportunity of modernization so that their task of interpreting the past of society might be performed in the light of the latest researches on the phases of social organization.

So great a degree of methodological activity could not proceed unscathed by the ultimate questions of a philosophy of history. The moot

problem of historical interpretation—that of the great man theory against historical determinism—received a fresh impetus from the subtilizing of the economic interpretation and from the psychoanalytic approach to biography. The cyclical theories of historical development, which in the previous generation had so brilliant a protagonist in Henry Adams, cropped up in a new form in Spengler. Croce gained considerable adherence to an essentially idealistic scheme of interpretation. But the actual writing of history went on, affected much more by the general intellectual character of the age than by this continued system building. It has often been pointed out that each age rewrites its history in accordance with its own preconceptions. Ours would seem to be, in an age dominated by science, an inveterate interest in and reliance upon causality, interrelationship of parts and biological growth and, in the post-war period of psychology and pragmatism, an emphasis on the realities behind the rhetoric of events. From this confusion of trends there emerged the "new historian" who, at his best, whatever the novelty of his jargon and the strangeness of his affiliations, retained the essential historical endowment of narrative power and charm, and a mordancy about human motives.

X. INTERRELATIONS. In a period of such rapid development for each of the social sciences the hegemony over the whole field could not be arrogated by any one of them. Efforts had been made in a previous period to build up a single science which would synthesize and eventually absorb the others. But the failure of this attempt where it had been most hopeful, in sociology, marked what was probably the climax of such efforts. A trend set in toward differentiation rather than synthesis. New sciences emerged, immature ones grew to maturity, studies were organized that acknowledged no sovereignty and knew no boundaries. In place of an ideal of imperialistic unity was substituted one of autonomy combined with the highest degree of intercommunication and fluidity of borrowings.

The group of studies that stood in this relationship came ever more surely to be known as "the social sciences." In the term there was conveyed the notion of a variety of interests bearing a kinship to one another, all of them concerned with the study of society and united by a similarity of interest and a community of methods in treating their common subject

matter. In university administration, learned society organization and popular consciousness there were growing indications of the acceptance of this notion of a unity in the social sciences. Specific incidents in this development were the formation of the Social Science Research Council, the organization of university departments and curricula, of research projects and foundations around the idea of a group of social studies, and the publication of symposia such as *The History and Prospects of the Social Sciences*, edited by H. E. Barnes (1925), *Recent Developments in the Social Sciences*, edited by E. C. Hayes (1927), *The Social Sciences and Their Interrelations*, edited by W. F. Ogburn and A. A. Goldenweiser (1927) and *Research in the Social Sciences*, edited by Wilson Gee (1929). As an item in the same process may be cited the launching of the present undertaking, with its intention of making available the combined viewpoints of all of the social sciences on the important social ideas, institutions or practises of the modern world.

This concept of the "social sciences" was obviously based on an analogy with the group of natural sciences. It met the need for opposing to the studies that dealt with matter a comparable group dealing with man and his activities. Not entirely negligible in this connection was the fact that such a rubric suited the convenience of university administration. But the most persuasive attribute of the phrase was the hint of certainties that it conveyed. It offered a warrant of the progress which these studies had already made toward the ideal of the natural sciences and an earnest of faithful intention to traverse the remainder of the distance. Those who disbelieved in the possibility or the desirability of such a rapprochement sought solace in the reflection that the adjective "social" qualified all harm out of the noun. Others, as they watched the certitude even of the natural sciences disintegrating before the new researches, accepted the term "sciences" as carrying with it no invidious superiorities but signifying only a body of knowledge, as did the German *Wissenschaften*.

The establishment of the group of social sciences as a definite entity made impossible on the part of any one of them an impulse for splendid isolation. The jealous maintenance of boundaries that had characterized the previous period had carried with it the belief that there was a province of fact in which all sciences but one were aliens. In terms of this belief the

principal task for that science was to delimit its scope and within that scope to clarify its concepts. But such a procedure, although conducive to precision, did not provide the continuous stimulation that comes from borrowings. The distinctive and fruitful results in the post-war period proceeded rather from the frequent foraging expeditions that crossed the boundaries from one science to another in search of whatever served their curiosities, or from the exploration of tracts which the previous delimitation of scope had left neglected.

Implied in this tendency was the view that each social science dealt rather with a phase of all human activity than with some definable portion of it. What distinguished one science from another in this view was not the possession of an exclusive range of material but the application to the common body of material of the method or "slant" which each had developed and which, it was hoped, would yield significances hitherto unrecognized. The family, for example, was a subject to which no one social science could any longer lay exclusive claim. Studied by the social biologist, anthropologist, psychologist, economist, political theorist, jurist, historian, educationist and social worker, it showed a different facet to the interest and approach of each. No adequate understanding of the nature of the family and no balanced appraisal of its social role could be formed by using the technique of a single science.

The divisions between the sciences, therefore, while retaining their significance as designations of the distinctive interest and approach of each, became irrelevant as actual working rules. If a problem was to be analyzed or an institution studied, its ramifications into every phase of activity defeated the boundaries of the sciences. The dominant trend became one of integration. Through group research an attempt was made to reconcile the apparently conflicting demands of specialism and totality of view. Where versatility lent courage the lone investigator followed his subject in its precarious trajectory through the realms of social science. More often the juxtaposition of intensive studies by several specialists was counted upon, with a blind faith, to result of itself in integration.

The greater interest, characteristic of a period of reconstruction, in the harnessing of research to the solution of immediate problems was only one element in the new situation. Equally important were the movements within each science in reaction to the formalism of the previous

period. The attempt to break old patterns was linked with the introduction of fresh thought from the outside. Often the ideas which were borrowed, as was evidenced when the economics of industrial relations strove to make use of the instinct hypothesis of the new psychology, were those whose viability even in their original habitat had not been tested. But the "borrowing" continued and added considerable richness to the social-scientific thought of the period. Facts, hypotheses, points of view and interpretative leads passed from one science to another.

This borrowing and the considerable influence exercised upon all of the social sciences by the prevailing intellectual mood of the period may account for the community of method that they possessed. The reliance upon the quantitative method characterized all of them and laid its imprint upon the period more deeply than any other approach. At the other extreme a method which became known as "institutionalism" and penetrated into economics, history, sociology, social psychology and law, emphasized the broad consequences of fundamental

social structures of idea and practise. "Functionalism" studied the essential role of any activity in its setting of social organization. The idea of the mastery of the social process by society, known variously as "social control" and "social engineering," turned the activity of practically every discipline in the direction of the application of its precepts. "Regionalism" brought with it the emphasis on the geographical unit of study which would yield actualities instead of hypotheses and could in the form of field study be encompassed at first hand by the observer. Configurationism in its varied forms made the task of each science at once more complex and more dynamic.

Throughout their range the social sciences showed evidences of the instability as well as the intellectual stir that accompany the contact and borrowing of ideas. They blurred rather than sharpened the outlines of their conceptions, and they did not capture immediate certainties. But they were storing up a vitality which would tide them over any lean years that might lie ahead.

EDITORIAL STAFF

INTRODUCTION: PART TWO

The Social Sciences as Disciplines

I

Great Britain

The outstanding feature of the development of the social sciences as disciplines in Great Britain is the lateness of their inclusion in the educational system. Despite apparently promising developments in Scotland in the eighteenth century and the foundation of a number of chairs in England and Ireland in the early nineteenth century, a special committee of the British Association for the Advancement of Science reported in 1894 that except at Oxford and Cambridge, where the study was very unsystematic, "it would be difficult to imagine a more complete indifference to the scientific study of economics than that displayed at the present time." Yet economics was then accorded greater academic recognition than any of the other social sciences. Anthropology was not taught in the universities until 1884, and sociology not until 1904. Political science had long been taught with varying effectiveness in connection with philosophy, but no chairs were created until the twentieth century. Modern history was studied very little at the universities until after 1850, and not until the end of the century was much attention paid to its social or economic aspects. Law has until recently been taught entirely as a professional or technical subject; in 1924 the Downing Professor at Cambridge claimed that in seven centuries of law teaching "the last fifteen years stands out in bold relief as a period of notable progress." Even today, except in London, the social sciences occupy the smallest, least popular, and least well-endowed position among all the subjects at the different universities, and they can scarcely be said to have penetrated the pre-university educational system.

I. THE UNIVERSITIES. This late academic development and subordinate position of the social sciences is not easily explained. British scientists made distinguished contributions to the social sciences during the nineteenth century. These sciences were systematically studied in foreign universities, where they had been an integral part of the educational system and attracted many and brilliant students. Even in Great Britain a host of learned societies actively

promoted their study outside university walls. Some explanation of the backwardness of universities may be found in the uncertainty as to the scope and content of the social sciences and as to their relation to the already accepted subjects of study, and in the lack of textbooks—explanations of singular relevance in relation to the position of the teaching of anthropology and sociology. The teaching of economics has been hampered, in addition, by allegations as to its identity with political propaganda.

Peculiar historical factors in British educational theory and development yield a more far reaching explanation. Until almost the end of the nineteenth century Oxford, Cambridge and London were the only English universities and, as far as educational policy was concerned, London was insignificant. The overwhelming social and educational prestige of Oxford and Cambridge led other universities, as they developed, in the direction of the educational ideals of the two older universities. Until the reforms of the Commission of 1852 were carried out, the colleges at Oxford and Cambridge were predominant; the universities were concerned only with conferring degrees, and the professors had little place in the university system. The first duty of the student was to attend college lectures and classes and to prepare for examinations over which the professors had little or no control. Attendance at professorial lectures was an indulgence by the student, and departure by the professors from the narrow field of textual commentary, or the introduction of subjects not bearing directly upon examination requirements, was fatal to the maintenance of an audience. The mere appointment of professors in the new sciences therefore availed nothing. The real problem was to embody the subjects in the examination syllabi.

From this point of view it was particularly unfortunate that the earlier chairs in the social sciences were frequently either tenable for a limited period of time, or so poorly endowed that their occupants were unable to concentrate upon securing a place for their subjects in the examination syllabus or even upon developing their science.

They were first of all government officials, lawyers, public men, or judges, and professors only in their spare time. Even in the latter part of the nineteenth century, when full time and adequately endowed chairs became more common, the old tradition, combined with the practical closeness of the connection between the social sciences and political or social life, led many professors to desert the classrooms more or less permanently for public life. This slow development of an academic social science profession has resulted in a relative paucity of good texts written by teachers.

All attempts to embody the new sciences in the university curricula met with great opposition. The older universities had always insisted that it was their function "to train the powers of the mind, not to give much positive or any professional knowledge." Supporters of the social sciences had therefore to demonstrate, first, that their subjects were not professional (as Blackstone's introductory lectures indicate, even English law was suspect) and, second, that as a training for the mind they were equal to the classics or to mathematics. The normal course for honors in most English colleges provides for at least one year of general education, followed by one or two years' specialization in the field in which the candidate has elected to study for honors. The first task of the advocates of the social sciences was thus to secure a place for them among the subjects which might be studied for honors. In the face of great opposition Whewell carried through the institution of a Moral Science Tripos at Cambridge in 1848, in which for the first time it was possible to pursue an honors course in moral philosophy, political economy, modern history, general jurisprudence and the laws of England. Two years later a school of law and modern history was created at Oxford as one of four schools which could be taken for the final honors degree. But the scope of the two new honors groups proved too broad to be popular. Simplifications were introduced at Cambridge after 1860, including the creation of a History Tripos in 1873, while at Oxford both history and jurisprudence were made into separate schools in 1872. Although the new schools attracted increasing numbers of students they paid little attention to the social sciences. Even the Moral Science Tripos at Cambridge, which recognized these sciences more completely, failed to attract more than a handful of students because of its heavy philosophy requirements. Nor were these handicaps in

the study of the social sciences eliminated by the creation of the Economics Tripos at Cambridge in 1903 or the Oxford Final Honours School of Philosophy, Politics and Economics in 1922. For, especially at Oxford, the preliminary examinations prior to final specialization involved so much attention to classics and either mathematics or logic that there was a strong temptation to continue in those fields rather than to attack what was virtually a new subject. Even today these disabilities of the social sciences have been but partially overcome.

Similar influences were at work in the other universities in Great Britain. The difficulty of persuading students to take the social sciences as subjects for an honors degree in arts or science, in the face of the usual enforced preliminary study of other subjects, ultimately resulted in the creation of special degrees in economics, commerce or administration in which the student concentrated for three years on various aspects of the social sciences. The creation of special degrees for the social sciences commenced in London in 1899, and most of the other universities, except Oxford and Cambridge, have now followed suit. Occasionally the sciences are not studied during undergraduate years but can be taken for a special diploma or certificate.

But the eventual embodiment of the social sciences in the university curricula and the removal of the requirement of a long preliminary study of the old established disciplines failed to overcome the greatest hindrance to their academic development, namely the tremendous and disproportionate prestige attaching to high honors in classics or mathematics. This extraordinary prestige of the older studies has been strengthened by the fact that university prizes, entrance scholarships and fellowships were long offered in these subjects alone. To study the social sciences was therefore to be doubly penalized: first, by selecting a field which had little academic status and, secondly, by being automatically barred from competing for public prizes. The efforts of enthusiastic benefactors in the last seventy years have failed to overcome the endowment of centuries and, except in London, the social sciences remain but poorly endowed in comparison with other branches of study. Consequently during the nineteenth century brilliant men rarely sacrificed their chances of distinction by embracing the study of the social sciences, and even today the best men, at least at Oxford and Cambridge, tend to specialize in

them only after they have achieved the desired distinction in the subjects that carry prestige.

Even the practical utility of some of the social sciences failed to stimulate their study. That a demand for men trained in the social sciences did not come in Great Britain, as it came elsewhere, from the legal profession and from the civil service, can be explained only by reference to traditional attitudes and historical accidents. Although in the thirteenth century Oxford was an important training center for lawyers, the gradual supersession of civil and canon law by common law in the centuries that followed caused the center of law teaching to shift from the universities to the schools of law attached to the courts in London. By the beginning of the nineteenth century the London schools had relinquished all teaching and the student of law acquired his knowledge empirically as a pupil in the offices of a practising lawyer. Despite the organization of teaching by the Incorporated Law Society (for solicitors) in 1833 and by the Council of Legal Education (for barristers) in 1852, both societies have adopted a narrow view of the training required for the profession. Not only has their own teaching been severely practical as a general rule, but they have also regarded the training given by the universities as altogether too theoretical to form a preparation for professional practise. Except for relatively unimportant and recent exceptions, they have refused to grant exemptions from their own examination and training requirements to holders of university degrees in law. Any development of the study of the wider aspects of law as a social science, rather than as a set of professional rules, has therefore taken place not because, but in spite of, the requirements of those who control entry to the profession. Even in Scotland, where famous schools of law existed in the eighteenth century, the two branches of the legal profession required attendance, if at all, merely at the more technical courses, and the audiences of the classes in Roman law or jurisprudence consisted largely of individual practising lawyers who took a more liberal view of their professional interests.

The British civil service tradition of the adaptable amateur administrator, who can be transferred if necessary from department to department, has created a demand for men with well-trained but not specialized minds. It is thus not a matter for surprise that until after the close of the World War individual social sciences were rated no higher than chemistry in the allocation

of maximum marks to the various subjects of examination. Only with difficulty did the view prevail that a training in the social sciences might prove an especially appropriate preparation for much of the work of modern government departments. In 1909 and 1913 the Anthropological Institute urged the government to insist upon anthropological training for candidates for the Indian and colonial civil services, but no formal arrangements have ever been made, and the heavy native language requirements of their year of special training has prevented these officers from taking full advantage of the special courses provided for them at Oxford and Cambridge. The recently formed Institute of Public Administration is endeavoring to foster the conception of administration as a unique profession, requiring a special training in which the social sciences shall play a large part.

From the beginning of the twentieth century a new impetus to the study of the social sciences has come from a recognition on the part of an increasing number of employers of the advantages of working with men trained in these disciplines. Thus the Institute of Bankers requires bank clerks taking its examinations to attend courses in economics and banking. Attention is, however, concentrated upon the practical and legal aspects of the subjects. The examinations in the social science subjects held by the professional associations of accountants, actuaries or municipal officials approach the subjects from a similar standpoint. Of more significance has been the increased emphasis upon training in the social sciences as a preparation for commercial life, which was stimulated by a belief in Germany's success in training business men and by the reality of German competition. These views had as their outcome the establishment of faculties of commerce in a number of universities.

In the majority of the universities the commerce degrees have been educational and liberal rather than narrowly vocational in emphasis, and during the two or three years of specialized study the student covers some considerable part of the fields of economic theory, economic history and geography, public administration and theory of industrial organization, as well as more practical subjects such as statistics, accounting or commercial law. The greater part of the purely professional commercial training is provided by "colleges" operated as private enterprises or by evening institutes organized

by public authorities; these have little or no educational status and offer courses narrowly practical in emphasis. Partly, perhaps, because of the wide educational character of the Commerce degree, business men and bankers are still reluctant to afford graduates professional preference, thus diminishing the inducement to the potential student to undertake training.

Schools of social work, more or less closely connected with the universities, have been developed, since the beginning of the twentieth century, for the training of health workers, charity administrators and other social workers. At these schools, of which those in London, Liverpool, Edinburgh and Manchester are perhaps the most important, the elements of economics, statistics, government and social theory are imparted, while advanced courses are occasionally given.

The combined effect of all these influences—the long absence of a full time and adequately endowed teaching staff, the slowness with which the social sciences were formally incorporated into the normal university educational curricula, and the absence of any stimulus from professional quarters—has been to retard the development of social science teaching in the universities. The impetus to their study has always come from outside the universities—from enthusiastic individuals or from the learned societies. It is therefore to be expected that the largest and most comprehensive center for the study of the social sciences should have developed from a specialized institution which was originally outside the university world. The London School of Economics and Political Science, founded in 1895, is today the most important center in Great Britain for the teaching of the social sciences. With a permanent teaching staff of over seventy, representing specialists in all the social sciences; with about half as many occasional lecturers dealing with matters in which they are experts; with a regular student body of between eight and nine hundred sitting for degree examinations and a total student body of over two thousand, it is a symbol of the new importance that has attached to the social sciences in Great Britain since the war. In accordance with the school's claim that the social sciences are in themselves a liberal education, the three years course provided for the B. Sc. (economics) degree is very broad. It is a degree in social science rather than in economics, and the newer chairs emphasize this orientation. Many of the courses

at the school can be offered for degrees in arts or law. Influenced in part, no doubt, by its location in the administrative and financial center of the country, and by the practical interest of many of its faculty in concrete social problems, the school has stood for a realistic and more comprehensive treatment of the social sciences and has revolutionized their status as academic disciplines. Elsewhere the organization of social science teaching generally groups around one central degree: the Economics Tripos or the economics special subject in the B.A. at Cambridge, the Honour School of Philosophy, Politics and Economics at Oxford, the degrees in economics or commerce at the other universities. The Cambridge staff includes thirteen economists and seven other members—economic historians, a statistician and a political scientist—and for intellectual distinction ranks high among the universities of Europe.

Methods of teaching are not uniform. At Oxford and Cambridge attendance at lectures is not compulsory and their subject matter represents a compromise between the personal interests of the lecturers and the syllabus for the examination. The inadequacies of the lectures are supplemented by an elaborate tutorial system which affords the student an opportunity for discussion and for obtaining criticism and advice as to reading. In London and in most of the provincial universities students are required to attend a minimum of lectures, which generally cover in outline the field set out in the syllabus, give guidance in reading and supply contemporary material and criticism. The London School of Economics also offers a large number of lectures on special subjects at which attendance is optional. Students at the school are attached in their first year to an adviser of studies who fulfils some of the functions of the tutor at the older universities; while in their second and third year the work of the students is supervised by the professor in charge of the department in which they have elected to specialize.

The line of division between the discussion class and the lecture is in general quite rigidly drawn, and the main emphasis is laid upon the lectures (which are frequently followed or supplemented by discussion classes). At all universities the writing by undergraduates of essays which involve considerable individual research is an integral part of the educational system, although the standards of performance vary widely. The universities usually aim to avoid the

use of texts; they encourage students to read widely and to coordinate their knowledge in class or in personal conference with the teacher. In the smaller colleges, however, where the staffs are small in relation to the number of students and to the subjects to be taught, the use of texts is more common, although the number of texts of university grade is relatively small.

II. THE DISCIPLINES. In order to discuss the development of the teaching of individual social sciences it is necessary to make an arbitrary definition of the social sciences as a group and of the scope of each subject, although in fact the distinction between the subjects is vague and is becoming more so as lines of approach and emphasis are modified in response to new doctrines in neighboring fields. It is possible, however, to distinguish four main groups: economics (including banking and currency, public finance, commerce and industrial organization, as well as theoretical and applied economics); history as a social study; law; and sociology (including anthropology and political science, the latter embracing the practise and theory of government).

Economics is today the most widely taught of all the social sciences, and since it was the first to enter the academic field it bore the brunt of the resistance to social science teaching. It was taught with varying degrees of effectiveness in the Scottish universities in the eighteenth century as part of the ethics section of moral philosophy, but it was only from Adam Smith that it received comprehensive and systematic treatment. Smith's friend Millar continued the tradition in part and dealt with economic doctrines in his law classes from 1761 to 1801. At the beginning of the nineteenth century Dugald Stewart at Edinburgh and Mylne at Glasgow were delivering separate courses on political economy. By the time of the Scottish universities Commission of 1831 the subject was being studied at all the universities except Aberdeen, for its own sake and not for the light it threw upon man's duty to man. Yet the recommendations of the commission that there should be professorships in political economy at Edinburgh and Glasgow were not carried into effect until 1870 and 1896, although a special lectureship was created in Glasgow in 1892.

Elsewhere in Great Britain, superficially at least, the situation appeared even more promising at the beginning of the nineteenth century.

Beeke and Symonds, the professors of modern history at Oxford and Cambridge, had introduced some discussion of economic doctrines into their lectures before 1810, and Malthus' appointment in 1805 as Professor of General History, Commerce and Finance at Haileybury, the East India Company's college, was followed in 1825 by Senior's appointment to the newly created Drummond Chair of Political Economy at Oxford. Meanwhile at Cambridge Pryme had delivered a course of lectures on economic theory from 1816, and was created an honorary professor in 1828. With the appointment of McCulloch in 1828 to a professorship in political economy at University College, London, of Richard Jones in 1831 at King's College, London, and of Longfield in 1832 to the new Whateley chair at Dublin, political economy seemed to have gained a secure foothold in the university system. But we have seen that the facts were otherwise. The lectures, usually limited to one course, frequently extended over only a part of the year and were but poorly attended; there was no opportunity for advanced work. Senior himself regarded the Oxford professorship as "rather for the purpose of occasioning books to be written than of affording oral instruction," and the same view seems to have been held by Whateley, Lloyd, Neate, Merivale, Twiss and other holders of the five-year chair. Although individual tutors occasionally lectured in the field, no second teaching appointment was made at Oxford until the creation in 1907 of an economic history lectureship (later a readership), to which a readership in economics was added in 1925. Both Thorold Rogers and Bonamy Price were active occupants of the Drummond chair, and in the eighties interest in economic subjects at Oxford revived, thanks partly to the personal enthusiasm of Toynbee. The treatment of economics at Oxford has been largely historical, in that emphasis is laid upon the study of past theories in relation to their historical setting, and teaching has been conditioned by the Oxford educational ideal to which reference has been made. Quantitative and statistical treatment of economics is almost entirely lacking and statistical material is but poorly represented in the Oxford libraries.

At Cambridge Pryme's lectures continued with occasional intermissions until 1863, when a paid professorship was created. Fawcett, as the first professor, delivered lectures which were classical in emphasis, and it was not until Marshall's appointment in 1885 that the influ-

ence of the work of European economists made itself felt in the teaching of economics. The change in emphasis was apparent at once; the scope of economics widened and the statistical and historical approaches were emphasized. As at Oxford, however, additions to the staff came but slowly. Lectureships in economics were created in 1896, 1904 and 1911, and in statistics in 1912. Nevertheless the scope of economics as taught at Cambridge is narrower than at London, especially in that less attention is given to the modifying influence of the other social sciences and much more time devoted to pure theory and to logical training. But Cambridge is, despite Edgeworth's long tenure of the Oxford chair, the most important center of mathematical and neoclassical economics in Great Britain.

In London the teaching of economics, which was suspended when McCulloch ceased teaching at University College, was resumed after Waley's appointment in 1853; but despite a succession of professors as able as Cairnes, Courtney, Jevons and Foxwell the subject, for reasons already indicated, failed to attract many students. After Jones' appointment as Malthus' successor at Haileybury in 1835 the teaching of economics ceased at King's College, London, for the professorship of principles and practise of commerce held by Joseph Lowe in 1831 seems to have been legal in emphasis. The Tooke professorship, created in 1859, like the Whateley professorship in Dublin, was remarkable rather for the quality of the men who held it (Thorold Rogers, Cunningham, Urwick, Hewins) than for the number of students attracted to lectures.

As already indicated, the real step forward in London began with the establishment of the London School of Economics in 1895 and the creation of a degree in economics in which economic theory was the central vitalizing principle. As the school has developed and the subject broadened out, professorships and readerships have been created to deal with such specialized topics as banking and currency theory, international trade, commerce and industrial organization; the emphasis, however, is on the essential unity of the study of the economic aspects of society. While under Cannan the approach to the advanced work in pure theory has been historical in emphasis, a course in the history of theory being the core of the work of the second and third years, Cannan's own skeptical common sense and interest in applied economics, together with the breadth of the curriculum and

the emphasis upon the interaction of all the social sciences, which is so marked a feature of the school, have tended to develop a center of economics teaching which is institutional and historical as compared with Cambridge, and statistical and concrete as compared with Oxford.

In other universities developments have been slower. In 1894 when the British Association investigated the teaching of economics, lectureships in economics existed only in Bristol, Manchester, St. Andrews and Glasgow, although there had been professorships in Edinburgh and Liverpool since 1870 and 1891 respectively. At a few other colleges some teaching was given by professors of philosophy or history, but everywhere the treatment was narrow in scope and subordinate to other subjects. There were "little more than general opportunities for showing economic knowledge in examinations primarily devoted to other subjects," and an almost complete absence of advanced study. The growing interest in social problems that marked the turn of the century, together with the increased economic pressure of Germany and the extension of government activity, attracted greater attention to the study of economics. This change was materially assisted by the new and more liberal conception of the subject that was beginning to prevail as a result of the work of Marshall and Cliffe Leslie, and of the economic historians Cunningham and Ashley. Economics departed more markedly from philosophy and logic as the breadth of its scope and the subtlety and complexity of its doctrines came to be appreciated. These forces have led to the creation of departments of economics, commerce or administration, and since the war students have turned to economics in increasing numbers; nevertheless outside the three larger universities the degrees seldom attract as many as thirty students a year and, except at Liverpool, Manchester and Birmingham, the economics faculty in its widest interpretation rarely exceeds six or eight persons and is usually much smaller. The nature of the teaching is conditioned by the fact that the curricula of these colleges are largely based upon those at London, and until recently most of the teachers have been trained at Oxford and Cambridge. The approach to economic theory has therefore been in the main that of Marshall.

Unlike some of the other social sciences, history has been studied at the universities from the time of their foundation. The development

of history teaching, therefore, has been the story of the adoption of a broader view of the scope and content of the subject, and of its enrichment by the opening up of new sources of material during the nineteenth century and by the infiltration of influences from the other social sciences. Despite the existence of professorships in history, historical studies long remained closely connected with the classics. As late as the middle of the eighteenth century attention was focused mainly upon ancient history and textual commentary. Until 1886 history was regarded at Oxford as an easy discipline which had to be stiffened by an admixture of law. History textbooks, according to information furnished to the Commission of 1852, were written mainly by foreigners, frequently untranslated, while their superiority to native literature was declared "incontestable."

Furthermore, when in the latter half of the century history was elevated to the status of an honors subject and additional teachers were appointed, those selected favored a school of history which emphasized constitutional and political developments. This applied especially to Oxford, famous for its history department; there Stubbs, while reviving the study of English history and making available sources hitherto inaccessible, tended to narrow the view of the historian and this attitude received confirmation from his successor, Freeman. The unreliability of Buckle's brilliant work limited his influence in academic circles and, although the scope of history was widened under Kingsley and Seeley at Cambridge, Cunningham complained in 1898 that the study of social history "received little recognition in academic and scientific circles." Toward the end of the century, however, there was a marked increase in the number of teaching appointments, while the personal influence of such historians as Toynbee, Cunningham and Ashley who were keenly interested in economic history, and of such economists as Leslie and Rogers who desired to broaden the basis of economics, operated in favor of a new view of history. Since the beginning of the twentieth century economic and social history has attracted some of the most brilliant workers in the social sciences. At Birmingham under Ashley, at Manchester under Unwin, at Cambridge under Cunningham and Clapham, and at London under Knowles and Tawney, important schools of social history have developed; and courses in economic history are given at all universities. In the schools devoted solely to history, how-

ever, now very important numerically, the new history has developed side by side with the older constitutional or political history, but it enters only as one of several papers in the main history examination and has not as yet led to a new synthesis. The greatest developments of social and economic history have occurred in the schools preparing for degrees in commerce or economics.

Sociology found no place as a special subject of study in any of the universities until 1904, when Spencer's death stimulated the academic recognition of his favorite subject more than had his lifetime of agitation. At Edinburgh Geddes founded in 1892 a school of sociology which was not connected with the university and which sought a biological synthesis of social studies and applied the theories of Comte and Le Play to the study of civic evolution. This movement, largely outside the universities, has led to the foundation of various civic societies, and to the establishment of summer schools where the methods of Geddes have been applied to the study of the regions where the conferences have been held.

The first formal university course in sociology was given at the London School of Economics in 1904; in the same year the subject obtained recognition in the curriculum of the university, and in 1905 a second lectureship was established. In 1908 both lectureships were changed to professorships. Additional members have been appointed to the staff since 1918, especially in the allied fields of anthropology and ethnology and lectures have frequently been delivered by non-academic experts. Yet despite the offer of scholarships to promote its study the subject failed to attract many students, although the addition of the London School of Sociology in 1912, under the title of the Ratan Tata Department, stimulated the study of elementary sociology and led to further additions to the staff. Under Hobhouse at London the teaching of sociology has reflected his views as to its scope and content. Sociology has been the study of social institutions and behavior; sociologists have sought, on the one hand, a unifying principle coordinating the social sciences and, on the other, an evaluation of social development with a strong emphasis on social philosophy. This sociological approach has considerably influenced, and has been itself influenced by, the study of the closely allied subjects, political science and anthropology. Apart from the schools of social work already referred to, sociology outside of London can be studied as a

special discipline only at Liverpool, where a department of social science with three lecturers and a professor has existed since 1923. Independent lectureships in sociology have existed for short periods at St. Andrews and Aberdeen.

The Scottish professors lectured on aspects of political science in connection with the moral philosophy courses before 1800, and the study occasionally found its way into the classical studies at Oxford and Cambridge before 1850. Thereafter it secured a recognized, though minor, place in the various honors schools; but although occasional lectures were given by interested Fellows, the study was not seriously pursued, and to this day the absence of standard and comprehensive works has hindered its development. At Oxford where a readership created in 1910 was made a professorship in 1912, and at Cambridge where a professorship was created in 1927, attention has centered in political theories and their development. Political science has been studied at the London School since the second year of its existence. A professorship in public administration was created in 1913 and in political science in 1915. There is today a considerable staff, and many students offer public administration as their main subject for the honors degree. The teaching covers both the development of political ideas and a study of the practical operation of political and administrative institutions. In these later aspects the study has been influenced by the work of the Webbs, and by the psychological approach of Wallas, whose *Human Nature in Politics* and *The Great Society* suggested new and fruitful methods of attack. Elsewhere the subject, if treated at all, is taught by a special lecturer or by the professor of philosophy.

Psychology, although established in the academic field by the beginning of the twentieth century, has claimed affinity with the natural rather than with the social sciences. Through the work of McDougall, Ginsberg and, for a tragically brief time, Rivers, it has considerably influenced the social sciences, although the implications of the newer psychology have had less influence on economics in England than in other countries. The recently established department of industrial psychology at Manchester, however, promises important developments.

In the latter half of the eighteenth century Millar of Glasgow had lectured and written on anthropological subjects, and at Edinburgh the professor of civil law had touched upon the field in the early years of the nineteenth century.

Nevertheless the efforts of the Royal Anthropological Institute and its two parent societies failed to obtain explicit academic recognition for anthropology until 1884, when Tylor was appointed reader at Oxford. Interest in this subject was first aroused in the universities by the professors of anatomy and of archaeology. Among the former Rolleston of Oxford prepared the way for Tylor, and McClelland at Cambridge delivered lectures in physical anthropology in 1884. Among the archaeologists Ridgeway in particular enriched the study of archaeology from 1882 by introducing anthropological methods and concepts, and by focusing interest in the subject by the formation of the University Anthropology Club in 1896. A lectureship in physical anthropology was created at Cambridge in 1893, and additions to the staff have since been made at both universities. Central boards of studies were created in 1904 to coordinate the work of the specialists whose lectures impinged on anthropological fields. An Anthropology Tripos was established at Cambridge in 1913, but has seldom attracted more than one or two students. Great stress is laid at Cambridge on field work of graduate status. At Oxford, except for an occasional student who may offer it as an additional subject in the Honours School of Natural Science, the study of anthropology is confined to graduates who may offer the subject for the B. Litt., B. Sc. or Ph. D. degrees. Efforts are made, however, to offer courses covering all aspects of the subject. In London anthropology has been taught in connection with sociology since 1904, and is now well recognized in the examination syllabi. It has gained considerably in popularity since 1918, and the teaching staff has been strengthened by the addition of workers in social anthropology. The main centers are University College (for physical and cultural anthropology and archaeology) and the London School of Economics (for ethnology and cultural anthropology), while physical anthropology is studied at King's College. Courses in ethnological subjects are delivered at the Imperial Institute and at the School of Oriental Studies. More coordination among the teaching groups is needed, and the subject, especially in the undergraduate courses, so far has failed to attract many students.

The British Association endeavored in 1900, and again in 1913 and 1923, to promote the academic study of anthropology. Yet except in the three larger universities, and at Liverpool, where courses have been developed in connec-

tion with the University Institute of Archaeology, and at the University of Wales, where anthropology is an important part of the honors course in geography, anthropology scarcely enters the teaching field. The teaching of geography is, however, being broadened to include some study of ethnology, and lectures in physical anthropology are given by the professors of anatomy in at least four colleges, although as a rule they are not compulsory. There is no doubt, however, that methods and results of anthropological studies are beginning to influence the teaching of other social sciences, especially sociology and economics.

It has already been suggested that law has in the main failed to receive attention as a social science in Great Britain because of the attitude of its professional organization and the educational theories held by the older universities. Chairs in civil law were established at Oxford and Cambridge in 1546 and 1540, and in English Law in 1758 and 1800. Nevertheless the Royal Commission of 1852 was informed that the Oxford professorship of English law was "a sinecure and a sham," and that the Regius professor of civil law had not lectured for more than a century. At Cambridge the situation was little better, and law was studied largely as an alternative to other subjects considered to be more difficult. The most comprehensive teaching was in Scotland, especially at Edinburgh and for a time at Glasgow, but the Commission of 1831 regretted the fact that law was not studied "as a liberal and enlightened subject." In the middle of the century Trinity College, Dublin, was an outstanding exception to the general decadence of law teaching. A series of investigations in England, a House of Commons inquiry in 1846, inquiries by the London University Commissions of 1895 and 1913, and deputations and discussions by the National Association for the Promotion of Social Science, all failed to stimulate the teaching of law in its wider aspects. Proposals for the establishment of a great law college in London, made intermittently since the middle of the nineteenth century, have all proved abortive because of the opposition of interested parties. Meanwhile the law staffs have been increased at the universities, especially in the fields of jurisprudence (beginning with Austin's appointment to the chair at University College, London, in 1828), Indian law, international law and commercial law, the initiative in all cases coming from the London colleges. The newly formed universities began to develop

law departments at the end of the nineteenth century. The movement was accelerated by the passage of the Solicitors Act of 1922, but for financial reasons the schools have been mainly professional.

The legal teaching controlled by the professional organizations is in the hands of lecturers the majority of whom are barristers, although some are members of university staffs. But the study of law as a subject for honors or for advanced degrees is growing in favor in the three larger universities. Undergraduate teaching is dominated by the desire to make the degree the vehicle for a liberal education. The fourth year (for a higher degree) aims definitely to provide professional training. Teaching methods have not changed noticeably. Occasional use is made of the case method in a modified form, but with no consciousness of any epoch making departure from traditional teaching technique.

The study of law has, however, been much enriched by the influence of Maine, Maitland and Vinogradoff. If Maine broadened the basis of the study of law by linking it with an analysis of historical developments, Maitland revealed the potentialities of legal sources for advanced historical studies. Vinogradoff not only developed both fields but also united them with the broader study of social development. Unfortunately the preoccupation of the older universities with undergraduate teaching prevented any of the three men from developing great new schools of legal research. They have introduced a study of historical development into the teaching of law, but the philosophical and sociological aspects of the subject remain relatively neglected. Some progress may be expected in the future from London, where the three large colleges have taken steps to coordinate their teaching, while the London School of Economics is showing a distinct tendency to direct attention to the importance of the study of law as an integral part of the study of society.

III. THE PRE-UNIVERSITY SCHOOLS.

The introduction of the social sciences into the pre-university educational system has been extremely tardy, owing partly to the slow progress of public education and partly to the sharp line drawn in the nineteenth century between primary and all other education. Since the primary schools were intended to meet the needs of a class which would obtain no other education and which would attend for but a short period, attention was concentrated upon imparting the

rudiments of reading, writing, grammar and arithmetic, with possibly a very little history. The teaching at the non-primary schools was dominated by the requirements of universities which, as we have seen, emphasized classical or mathematical studies.

From 1840 onward William Ellis began teaching social economy in the primary schools of London, and even founded schools on condition that the subject be taught. He also wrote several popular texts. In 1871, when a deputation from the National Association for the Promotion of Social Sciences urged upon the Educational Committee of the Privy Council the teaching of economics in schools under public inspection, it pointed to the work of Ellis and his followers in various parts of the country as evidence that it was possible to teach the subject to young people with success. The committee, however, although willing to recognize the subject when taught competently, preferred that the initiative in its introduction should come from the schools or from the enthusiasm of individual inspectors. Jevons took advantage of this opportunity to secure the introduction of the teaching of political economy into some of the schools in the Manchester district. Although some impetus was given to its study in grammar, high, and secondary schools by the inclusion of political economy as an optional subject in the Oxford and Cambridge local examinations, by 1900 the subject had made little progress in these schools and none at all in the elementary schools.

Political economy is taught today, if at all, mainly in connection with history, itself a somewhat neglected subject. The character of the teaching of history in the schools during most of the nineteenth century called forth the gibe that it "combined the respective disadvantages of the multiplication table and the Newgate Calendar," and not until after Green's *Short History of England* in 1874 had indicated a method, and Traill's editorship of *Social England* between 1893 and 1897 had supplied material, was new emphasis introduced. Recent years have witnessed a movement to teach more social and contemporary history, but the new textbooks have not yet conquered the field. Recently the teaching of geography has been broadened to allow emphasis upon human and historical geography, a change in which the influence of the ethnologist and sociologist is evident. A new impetus to the study of political economy and economic history may be

expected from the recent inclusion of economics as an alternative to science or Latin in the senior schools and the London matriculation examination for which pupils are prepared all over the country.

To encourage the teaching of civics has been the object of the Civic and Moral Education League (formed in 1898 as the Moral Education League) and, from 1920 onward, of a special committee of the British Association. In the public elementary schools some indirect attention is paid to what might be regarded as civics in connection with lessons in history and in health, and some specific training in civics is given in individual secondary schools. Opinions as to its utility, however, differ widely. The number of textbooks on civics is large, but the problem of devising a course which shall avoid both details of government administration and civic duties, and moral maxims and patriotic exhortations, is not yet solved.

IV. POPULAR INTEREST. Popular interest in the social sciences has fluctuated in both intensity and direction. At the beginning of the nineteenth century economics was a popular fad. This situation was due in part to the industrial changes of the time and to the war, both of which were raising acute economic problems, and in part to the publication, following upon Smith's *Wealth of Nations*, of a series of books which for the first time gave promise of a science of economics. The sequel is evident in the enormous popularity of such expositions as Mrs. Marcet's *Conversations* and Harriet Martineau's *Tales in Political Economy*, and in more educated circles in the space devoted to social and economic discussions in such journals as the *Edinburgh* and *Quarterly* reviews. In the middle of the century contemporary interest concentrated upon the origin of man and resulted in a great increase in the popularity of ethnology and anthropology. With the publication of Darwin's *Origin of Species* in 1859 public interest reached its peak and thereafter declined. In the last quarter of the century public interest in the social sciences was at a low ebb. But Spencer's work achieved considerable popularity from time to time, and there was sufficient interest in a vague and semi-philanthropical social science to attract the exploitative activities of founders of popular sociological journals which seldom had a long career. Ruskin's lectures and addresses confirmed the prevailing conception of economics as harsh and unrealistic without offering

any positive substitute. The twentieth century brought a marked change. The problem of poverty became of pressing importance, and the development of a political labor party revived interest in the social sciences to such a degree that they are today probably more popular than any other branch of study.

Newspapers and popular periodicals of every creed and party have always been used to influence public opinion on the issues of the day. However, the smallness of the book reading public and the high cost of printed matter of necessity directed the efforts of the promoters of the popular study of the social sciences toward securing a forum from which lectures could be delivered. This need was partly met by a spontaneous movement from the public. Mechanics institutes were established after 1823, and numerous literary and philosophical societies supported by a somewhat higher social class sprang up all over the country, particularly in the middle third of the century. From 1853 the cooperative societies devoted a portion of their funds to education. From 1873 the universities began to offer extension lectures, and the Workers' Education Association, founded in 1903, also provided centers at which lectures could be given and discussions initiated. Despite the closeness of the relation between cooperative theory and economics, the regular classes in the social sciences, organized by the cooperatives from 1897 onwards, have been relatively unpopular, although there is a growing interest in industrial history. Until 1900 very few lectures on social science topics were given under the auspices of the university extension movement, but in recent years their number has increased relatively to all other subjects. The first classes in economics given by the Workers' Education Association in 1908 attracted students fewer in number than those attending other subjects, but whose desire to pursue the study more intensively led to the ultimate development of the tutorial class system. Such classes in the social sciences, frequently extending over three years, form over fifty percent of all courses organized by the Workers' Education Association. The proportion is considerably greater in the courses under the auspices of the less important, class conscious National Council of Labour Colleges which broke away from the Workers' Education Association in 1909.

Popular interest in the study of the social sciences has often been stimulated by political or partisan bodies. Of these the most important

have been the Anti-Corn Law League, the Cobden Club and the Fabian Society. The former provided lecturers during the forties to teach political economy (with of course a free trade bias) to vast audiences all over the country. In 1843 alone the league distributed a million tracts through a staff of eight hundred persons. In 1866 the Cobden Club, animated by a similar interest in free trade, organized lectures, arranged for the publication in cheap form of economic works which advocated their principles, and from 1874 onward offered prizes for essays on economic subjects to students attending the universities and university extension courses. These prizes are still offered, although the other activities of the club have become unimportant. From 1884 the Fabian Society has diffused an interest in the study of the social sciences reaching far beyond its own membership through the publication of cheap *Fabian Tracts*, by holding public meetings and by providing lectures. More recently social questions have been studied by conferences and summer schools under the auspices of the different political parties.

The social sciences have been peculiarly fortunate in attracting the interest of men with an almost fanatical belief in the importance of promoting the study of their favorite science: McCulloch, who delivered lectures in Edinburgh and London and was an active publicist; Lord Brougham, who formed societies and financed the delivery of lectures and the publication of literature; Ellis, who founded schools and delivered lectures in various parts of the country; Hunt, the energetic founder of the Anthropology Society who delivered lectures everywhere and published magazines at his own expense; Spencer, the latter part of whose life was a constant plea for the study of sociology. The learned societies, too, have played their part, especially anthropological, ethnological and sociological societies. One of the most important achievements of the National Association for the Promotion of Social Science was its success in popularizing and extending the interest in the social sciences, especially in the localities in which its annual conferences were held. Universities and special benefactions have provided from time to time for such permanent lecture foundations as the Barrington, Gifford, Stevenson, Newmarch, or special public lectures which deal with the social sciences. Still more recently lectures in these subjects, delivered by well known experts, have been among the more pop-

ular of the educational courses included in the programs broadcast by radio.

V. THE LEARNED SOCIETIES. In the absence of any lead from the universities the learned societies played a unique part in promoting the study of the social sciences in the nineteenth century. For the greater part of the period they provided the only center where specialists could meet, and not only supplied a platform for the reading and discussion of papers and usually a medium of publication, but also pressed the claims of their sciences on all occasions, and agitated to secure for them greater academic recognition. Most of the teachers of the social sciences were members of one or more of these societies, and new teaching appointments were frequently made from among the more prominent members.

Of the large number of relatively small discussion groups and clubs (such as the Trijackea, the Utilitarian Society and the Edinburgh Speculative Society) which flourished in the first quarter of the nineteenth century and which were attended mainly by the Benthamite radicals or the so-called classical economists, only the Political Economy Club survives. This famous society was founded in 1821 by Tooke with the object of "promoting the knowledge of political economy"; members were to regard "their own mutual instruction and the diffusion among others of just principles of political economy as a real and important obligation." Its small and limited membership, which originally included Ricardo, Malthus, Senior, McCulloch and Whately, consisted mainly of business men, politicians and public officials, but certain professors were later made members *ex officio*. Although in the century of its existence its members have included most of the chancellors of the exchequer and many well known public characters and prominent economists, the club has been famous rather than important. The quality of its debates has not always been maintained, and its limited membership and the absence of organized publicity have prevented it from playing a large part in the promotion of the study of economics outside its own ranks.

The discussions at the club, however, provide in miniature a history of the development of economics during the century. Holding a firm belief in the existence of "sound political economy" the club at first confined itself to the settlement of debated points of theory and the search for agreed and final definitions, and often

disposed of as many as three issues in one evening. In the third quarter of the century the club became more interested in concrete problems; although doubts as to the invincible wisdom of laissez-faire began to obtrude themselves, it was still assumed that "whatever is in accord with the laws of political economy is necessarily right and proper and vice versa." In later years elaborate papers occupying the whole evening have come to take the place of the less formal discussions between members, so that "the provinces of the Statistical Society and the Political Economy Club tend to become confused."

Three statistical societies exist in Great Britain. The oldest, the Statistical Society of Manchester, was formed in 1833 and at first worked through committees which collected material and rendered reports on social conditions. These were at first published separately, but since 1853 have been included in a *Journal*. The majority of papers have been statistical or theoretical treatments of particular economic or social problems. Very few papers have been devoted to statistical technique, and in this respect the character of the society is unchanged today and closely resembles that of the more important Statistical Society of London. This latter society, which was formed in 1834 with a membership that included Malthus, Babbage, Richard Jones, Tooke, Senior and Whewell, was originally divided into four great sections: political, economical, medical, and moral and intellectual. The *Journal*, which continues at the present time, was first published in 1838. Fear of political entanglements led the society until 1857 to exclude discussion of causes and effects from its field and to concentrate on the collection of facts. Of recent years more attention has been paid to methods and technique, with which about a third of the printed papers are now concerned, but a detailed report on some statistical investigation more frequently affords the basis of discussion at general meetings. Committees of the society have been appointed from time to time to deal with specific problems such as the taking of the census, or to report on housing, strikes or education. In 1927 a proposal was made for less formal meetings at which junior members of the society could discuss developments of interest to the science as a whole.

A more general interest in social questions has characterized the Statistical Society of Dublin, formed in 1847 through the efforts of Hancock, at that time Whately professor. Its object

was to "promote the study of statistical and economical knowledge," and the papers read at its meetings were printed at first separately but from 1855 onward in the society's *Journal*. A Social Inquiry Society was formed under its auspices in 1850. In 1862 the parent society was itself reorganized on the lines of the National Association for the Promotion of Social Science which had visited Dublin in the previous year, and its name was changed to the Statistical and Social Inquiry Society of Ireland. Prizes were offered for investigations into special subjects, and in 1875 a special Charity Organization Committee issued a series of important reports. In addition to the activities of its subcommittees and its efforts to build up a library, the society holds monthly meetings at which papers are read. In 1851 a branch society was formed in Belfast.

In 1832 the British Association created with some misgivings a section for statistics, with interests in early years closely resembling those of the Statistical Society. Gradually, however, papers on economic and social topics predominated, and in 1864 the section became Section F (Economic Science and Statistics). Papers have since been of two kinds: reports on the social and economic conditions of the district in which the meeting for the year was held, and papers, mainly descriptive, dealing with special topics of contemporary interest in the field of economics. Singularly little attention has been paid to problems of method and technique, and although occasional presidential addresses have endeavored to give a synthetic view of the state of the science or to suggest outstanding problems, little has been done to give unity to the discussions at different meetings. Papers continue to reflect the particular bent of individuals.

The Royal Economic Society, founded in 1890, has a large membership but is mainly a publishing society, and very few meetings have ever been held. Its *Economic Journal*, published quarterly, is, however, the most important economic publication in Great Britain, and more recently it has subsidized the publication of books. The Christian Social Union, which existed from 1890 to 1914, published leaflets and arranged lectures. Its journal, the *Economic Review*, was not only the first economic quarterly but also maintained a high scholastic standard and represented all shades of opinion. The study of economics has been promoted by other societies such as the London Economic

Club, small private societies at Oxford and Cambridge, and the Scottish Society of Economists (formed in 1897). The Association of Teachers of Economics, formed in 1924, has tended to give prominence to papers on special topics in which readers have carried out research, at the expense of discussions on teaching and the problems of the science as a whole.

Anthropologists have always been active in their learned societies. The Anthropology Section (H) of the British Association, created in 1884 as the result of long agitation by anthropologists, has been one of the most active units of the association and has, unlike the Economics Section, made extensive use of the committee system provided by the association for the purpose of dealing with matters of interest to the science as a whole. The Ethnological Society, formed in 1844, had a checkered career, but did valuable work in bringing together the few individuals who were interested in the subject. Its timidity in entering controversial fields and its deductive methodology led James Hunt, an ardent but not always wise anthropologist, to break away and form a rival Anthropological Society, which did much to broaden the study of the science in Great Britain by the translation and publication of works by foreign anthropologists. Until 1871 when, after the death of Hunt, Huxley was instrumental in achieving the amalgamation of the two societies to form the Anthropological Institute, anthropological study was hindered by disputes between the two groups concerning the origin of man, which came to a crisis over the Governor Eyre prosecution. Since 1871 a more sober and scientific atmosphere has prevailed.

All three groups had published journals which provided for the publication of research and the diffusion of a knowledge of the work done at home and abroad. The *Journal* of the institute is its main organ, and *Man*, a publication dealing with current literature and containing short contributions from field workers, has been published since 1901. For many years the scope of the science troubled the institute, and successive presidential addresses offered definitions of the field and rejected those of their predecessors. Of the large number of papers read and published during the last fifty years, those on physical or anatomical anthropology and on archaeology have gradually ceded place in numbers to papers on cultural and social anthropology. Contributions of varying quality are made also by the Folk Lore Society (founded in 1874),

the Royal Archaeological Institute of Great Britain, the Society of Antiquaries in London and numerous local archaeological societies.

The National Association for the Promotion of Social Science, founded in 1857, emphasized for nearly thirty years, in its annual congresses and weekly meetings and subcommittees, the importance of a study of the social sciences. Among its large and active membership were numbered many of the leading jurists—including Westlake, Harcourt and Levi—and most of the academic economists of the period. J. S. Mill, Fawcett, Jevons, Newmarch, Farr and Chadwick were among the members of the executive committee, which also included some seventy to eighty members of Parliament, a fact which enabled the association to give legislative effect to many of its proposals. The association published an annual volume of *Transactions* and occasional special reports. The object of the association was to afford those engaged in the numerous reform activities of the time "an opportunity for considering social economics as a great whole." Brougham and his optimistic cofounders believed that the association would be the means of discovering the "moral laws of the universe," which were "no less uniform, less simple and less secure" than the physical laws studied by the British Association. And yet despite its emphatic "belief in the unity of the social sciences" the greatest work of the association was accomplished precisely when it departed from its original aims. From the first the scope of the field to be covered led to a division into five sections, ultimately reduced to four: jurisprudence and amendment of the law, education, health, and economy and trade. The division was inevitable if advanced work was to be done, but certain to obstruct the desired synthesis of the social sciences. The addresses of the presidents of the sections at the annual congresses furnished no great measure of coordination, and in fact the sections went their individual ways. Especially noteworthy was the work of the section on jurisprudence, which amalgamated in 1863 with the Law Amendment Society, itself founded in 1844. It was directly responsible for many of the numerous coordinating and simplifying legal measures enacted between 1860 and 1885. Above all it stimulated many discussions by active lawyers as to the purpose of law and the relation of content to form, and led to a renewed interest in jurisprudence and, by virtue of Westlake's activity, in international law.

The scholastic achievements of the other sections were less significant. If those dealing with education and public health on the whole avoided deep speculative waters, it was because they found much practical work at hand; but even so the papers at the sessions contain valuable material on the social condition of Great Britain at the time. The economics section, producing less spectacular concrete results, was responsible for a series of valuable papers and reports on economic conditions, whose descriptive nature and reformist bias supplied a much needed balance, and allayed the prevailing suspicions in regard to the compatibility of economic theory and practical reform.

More lasting stimulus to the study of sociology, however, came from the Sociological Society, formed in 1903 in order to bring together the students of the individual social sciences "to set forth the unity of the social world and to organize more effective cooperation." A minority of the members were specialists engaged in research, but the majority were persons with general interests, or practical workers who encountered sociological problems in their daily work. The society published three volumes of *Papers*, replaced in 1908 by the quarterly *Sociological Review*, in which papers read at the meetings were discussed. From time to time groups of members formed special committees to consider particular problems. The earlier discussions centering around the objects and scope of the science attracted attention both abroad and at home, and did much to remove popular misconceptions as to the meaning of sociology. Later, as a diversity of subjects appeared in the discussions, the society operated rather to broaden the views of specialists in their own fields than to develop a new synthetic science. A cleavage between the views of the groups led respectively by Geddes and Hobhouse left the former group predominant in the society, and since about 1914 the *Review* has mainly reflected its interests. The influence of this group was further strengthened by the foundation by two of its members of the Le Play House Trust in 1920, which facilitated the correlation of work in the field of civic surveys and also made possible the collection of materials and exhibits.

Shortly after the war the Sociology Club, under the leadership of Hobhouse, was formed at the London School of Economics with the object of coordinating the work of students in the fields of the social sciences. The club meets

two or three times a term but publishes no records of its proceedings.

Until 1886 all efforts to found a historical review met with rebuffs from publishers. The Royal Historical Society, which in 1868 was formed to promote the study of history, was for long composed mainly of amateurs. From 1886, however, the quarterly *English Historical Review* has been issued, which publishes researches on specialized topics in the field of political and administrative history. The Historical Association, founded in 1906, is more popular in appeal, and has a large membership with numerous local branches. Interested mainly in the study and teaching of history, it maintains a library, has annual meetings at which papers are read, publishes bibliographies and, since 1916, a quarterly, *History*. The society has done much to broaden the teaching of history.

In 1927 the Economic History Society was formed to promote the study and teaching of economic history. Its membership consists largely of teachers of the subject, whose interests it aims to promote. It publishes an annual volume embodying the results of research by individual members. Other historical publications which deal from time to time with history as a social science are the *Scottish Historical Review* and the newly formed *Cambridge Historical Journal*. Since 1926 the Royal Economic Society has published an additional annual volume devoted to contributions to economic history.

Mention has already been made of the activities of the Incorporated Law Society and the Council of Legal Education. Several other societies exist or have existed to promote the study of law. The Legal Education Association was formed in 1870 to improve the study of law and to secure the creation of a law university in London. Failing in this latter aim, the society handed over its funds to the Law Society in 1901 after having accomplished useful work in directing attention to the importance of reform in legal education. In 1889 the Scottish Juridical Society, formed several years earlier, commenced the publication of the *Juridical Review*, which has consistently emphasized the closeness of the connection between political science and jurisprudence. The Society of Comparative Legislation, formed in 1894 to apply the comparative method to jurisprudence, has published from 1896 onwards the important *Journal of Comparative Legislation and International Law*. The Society of Public Teachers of Law, formed in 1908, is of more interest to

the student of social science teaching. It has done excellent work in improving the quality of teaching and in broadening the syllabi. Papers are read at annual meetings and since 1924 a *Journal* has been published. Occasionally committees are formed to investigate special subjects. The Society of Commercial and Industrial Law, formed in 1921 by teachers in these fields, is of minor importance. The most important English law journal is the *Law Quarterly Review*, first published in 1885 under the editorship of Pollock. It contains technical legal articles, notes on current cases and book reviews.

VI. RESEARCH. Special training for research in the social sciences has developed but slowly in Great Britain, even since the war. Not only has research generally been regarded as the pastime of the enthusiastic individual, but it has been assumed that a thorough undergraduate training without further supplementation qualified a man for research. The universities have been slow to admit the necessity for a training too technical for inclusion in undergraduate courses. Even in the London School of Economics which, founded as it was under the influence of Sidney and Beatrice Webb, in its early program emphasized the importance of research technique, the teaching work is still organized primarily to meet the needs of undergraduates. As in other universities, the professors have a relatively large number of undergraduate courses and the methods of research training have not been clearly worked out. The school differs from most of the other universities in the large number of specialists in the social sciences on its staff, and in the attention paid to research seminars in individual subjects. Elsewhere, with such outstanding exceptions as the work of Tout in the Manchester History School and of Vinogradoff in jurisprudence at Oxford, the seminar has been little used as a method of graduate training.

Some research training within the universities is provided by the Galton Laboratory for National Eugenics, which publishes the *Annals of Eugenics*, and by the Biometric Laboratory, which publishes *Biometrika*, both at University College, London. In another field the Institute of Historical Research is an important center for study and training, although it has little concern with the broader aspects of history.

Quite as apparent as the lack of specific training for research has been the need for coordination of whatever research is carried on. The

learned societies might have promoted the discussion of common problems among experts, but they have not been greatly concerned with methods or techniques. The overlapping and confusion have been somewhat diminished, however, by the concentration of work in the social sciences at the London School of Economics, which has attracted more than seventy percent of all research students. In 1928 a Social Science Research Training Committee was set up in London to encourage the scientific development of economics and sociology, and "to secure the advantages of interchangeability and comparability in the results of research work" at the different universities. It is significant of a new emphasis that the committee in awarding scholarships for research will pay more attention to the methodological potentialities of the problem chosen for investigation than to any intrinsic importance in the subject itself.

Although inducements for research in the social sciences have increased since 1918, particularly in the generous traveling research fellowship and in the direct grants to British universities by the Laura Spelman Rockefeller Foundation, the relative financial poverty of the social sciences still affects seriously the volume and nature of advanced research. It has been reflected in the slight development of institutes for corporate research. Occasionally universities have organized cooperative programs, and groups of individuals have undertaken such work as the Cambridge histories. The more active of the learned societies have from time to time appointed committees for research in particular problems, but large endowed research institutes do not exist.

There are, however, some beginnings of corporate research. In 1923 a Railway Bureau was established at the London School of Economics to conduct research into railway problems. The London and Cambridge Economic Service, instituted in 1923 and supported by contributing firms, although it has only one full time editor and relies upon the teaching staff of the universities for material, issues monthly and quarterly publications and occasional memoranda on special economic subjects. The important Institute of Agricultural Economics at Oxford conducts research and publishes memoranda. The National Institute of Industrial Psychology, which is partially self-supporting, was incorporated in 1921. With a staff of psychologists, psychiatrists, economists and medical men

it undertakes scientific investigation into industrial fatigue, vocational guidance and industrial planning and organization so far as they affect the worker. Occasionally it cooperates with the Industrial Fatigue Research Board and other government departments. Recently various government departments, particularly the Ministries of Agriculture and Labour, have begun to establish research divisions. Some measure of corporate research is also to be expected in the future from the Royal Institute of International Affairs and from the rapidly expanding department of international affairs at the London School of Economics.

Research in the social sciences is still limited by the paucity of equipment, a further reflection of financial poverty. Mechanical statistical devices are few in number and frequently primitive in kind. While the older universities, the British Museum, the Record Office and the law societies possess rich historical and legal libraries, there is a general lack of contemporary and statistical material and of foreign works. More recently the excessively high prices charged for official publications have further limited the purchase by university libraries of essential source material. The learned societies have made the collection of a library one of their main objectives, and the Statistical Society has frequently suggested improvements in the collection and presentation of statistics by the government. At present important collections of physical anthropological material exist at many of the universities, but the famous Pitt Rivers Collection at Oxford was originally a private collection, and for many years the Anthropological Institute stressed with little success the importance of adequate museums. Until the foundation of the British Library of Political and Economic Science at the London School in 1895 there was no complete collection of literature relating to the administrative authorities of the country. But since the eighties of the last century the British Museum collections have been enlarged and rendered more accessible; and the availability of the rich resources of the many private and public libraries of London will be greatly increased after the publication of the comprehensive London *Bibliography of the Social Sciences*.

VII. CONCLUSION. There is ample evidence that the long fight of the social sciences for academic recognition is to have a triumphant conclusion. The prejudice against them is dis-

appearing, while the events of the post-war years have directed attention to the pressing importance of social problems of all kinds. That this increased interest in the social sciences is not confined merely to those of practical importance, such as economics, is indicated by the recent foundation of the important British Institute of Philosophical Studies.

Since the war there have been at all the universities marked increases in the social science teaching staffs and in the numbers of students; subjects are being given more prominence in the curricula for first degrees. The success of the London School of Economics will do much to stimulate the popularity of the social sciences as an academic discipline by providing a richly endowed center where all aspects of the field can be studied. The great increase in the numbers of students taking training in research or offering the social sciences for higher degrees is a reflection of the slowly growing awareness of the importance of research technique. Work in the social sciences is coming to be less and less the hobby of the interested amateur. With this changed attitude there is likely to be a change in the relative importance of the learned societies which were of such significance in the

nineteenth century. Now that the universities provide centers where interested individuals may meet those working in similar fields, one of the older functions of the societies has disappeared. They are likely in the future to concern themselves more positively with the organization and coordination of research on a larger scale. And although the question of finance is still crucial, there is likely to be a further development of corporate research, organized either by the universities or the societies or by newly created coordinating bodies.

E. M. BURNS

Consult: Universities of Scotland Commission Report, in Great Britain, Parliament, *Sessional Papers 1831* (London 1831) vol. xii, p. 111-547; Great Britain, Oxford University Commission, *Report* (London 1852); Great Britain, Cambridge University Commission, *Report*, 2 vols. (London 1852-53). Little has been written specifically on the teaching of the social sciences in Great Britain. However, the reader may consult: British Association for the Advancement of Science, *Report of Meetings*, vol. lxiv (1894) 365-91, vol. lxxxiv (1914) 235-36 and vol. xci (1923) 417-21 (reports on the teaching of economics and anthropology); Society of Public Teachers of Law, *Journal*, vol. i- (1924-); *History*, vol. i- (1912-); and proceedings of the various learned societies as well as the lives of some of the more important teachers of the social sciences.

II

France, Belgium and Romanic Switzerland

I. A history of the social sciences in France would be incomplete if it neglected the whole period preceding the nineteenth century. One need not go back to the Middle Ages, in which one could nevertheless, without forcing the terms, consider as "social sciences" the teaching of the Glossators and especially of the post-Glossators (Bartolus and his disciples) and of the founders of the canon law. The century of the Renaissance and the Reformation without doubt witnessed the flowering of works that brought social problems down from heaven to earth and formulated them in positive terms. It is chiefly in the matter of public and of international law that this change in orientation is significant. To grasp it, all that is necessary is to recall, in connection with the first of these disciplines, the name of Bodin, and, in connection with the second, that of Grotius, whose influence was considerable in France, as in all of occidental Europe. But economic phenomena themselves profited by this great intellectual ferment, and it is not without reason that, before Adam Smith, Montchrétien could be called the father of political economy.

If any generalization is suggested by the examination of the social sciences in their historic evolution, it is surely that they cannot live and flourish except in a relatively liberal medium. All progress in social science (private law, perhaps, excepted) exacts as a necessary preliminary the right to criticize existing institutions, and that right is the very thing which authoritarian and absolutistic regimes generally deny. It is not surprising that the seventeenth century saw scarcely any development of the social sciences in France, either in teaching or in theoretical writing.

The great movement of intellectual and social reform which characterized the following century concentrated on two points—the struggle against the church and the recasting of institutions in the direction of democracy. This is not the place to describe the part played by each of its promoters—Montesquieu, Voltaire, Rousseau, Turgot, Condorcet, Diderot, d'Alembert and the *encyclopédistes*—but it should be

noted that their influence, however powerful it may have been, was indirect. Their invaluable service lies in having drawn public attention to questions of a political and economic order, in having emphasized their importance, in having considered them as possible objects of a positive science. On the other hand the new regime instituted in the wake of the revolution gave prominence to these questions in its program of instruction. Indeed the instruction reserved for the social sciences during the post-revolutionary period was more practical than scientific, in the sense that it had the training of future administrators in view and was largely inspired by the example of Germany, where the study of the so-called "cameral" sciences was customary. It is none the less true that a new taste for the social sciences was asserting itself in France as elsewhere. In support of this statement need only be mentioned two important creations on the part of the Convention, that of a second class of the so-called moral and political sciences at the Institut de France, reorganized in the year IV, and that of the Conservatoire National des Arts et Métiers, which was founded in 1792.

Napoleon's absolute power hardly conformed with liberal reflection on social matters; by a gesture symptomatic of his dislike of ideologists he suppressed the second class of the institute. As for the law courses in the imperial university, they had no other object than the exegesis of the five great codes elaborated in the first year of the century.

The Restoration was no more favorable to social science than the preceding regime had been. But the impulse had been given, and reflection on social facts became more intense each day. Henri de Saint-Simon laid down some of the fundamental principles of sociology and Auguste Comte applied to them the resources of an exceptionally vigorous and original mind. At the same time Fourier began to propagate his ideas, some nebulous, others fruitful. But this whole movement of ideas took place outside the university and, in large measure, as a reaction against it.

The July Revolution was destined to open wider the door to these new trends. Beginning with 1830, a chair of political economy was founded at the Collège de France and entrusted to J. B. Say. Another was created for Garnier in 1846 at the Ecole Nationale des Ponts et Chaussées. At the Collège de France, before an eager audience, Michelet and Quinet treated the most important social problems of the day. Augustin Thierry's works pointed out the influence of collective forces as well as that of individuals. At the newly founded Ecole des Chartes teachers of impeccable erudition, like Benjamin Guérard, tried to give a more veracious picture of the Middle Ages than was given by romantic writers of the same period. Two ministers of the bourgeois monarchy, Guizot and Salvandy, possessed the merit of wanting to give to the social sciences their due place. Guizot, himself a profound and original historian preoccupied with sociology, as witness his *Leçons sur l'histoire de la civilisation*, performed a decisive act in calling Rossi to the faculty of law in Paris to teach constitutional law in a new and really scientific spirit. Salvandy proposed to give the law faculties a new impulse and to draw up for them a very strict and modern program, which circumstances alone prevented him from realizing.

The protection accorded the social sciences by Louis Philippe was not unlimited, and theories that were too bold were more than once refused the right of expression. Michelet's and Quinet's courses were suspended; Saint-Simonism was alternately popular and discredited; and Proudhon had to struggle all his life against a public opinion which was scandalized by his paradoxes.

The Revolution of 1848 and the democratic conquests—notably that of universal suffrage—which it sanctioned, powerfully drew public attention toward questions of a political and economic order. The name of Louis Blanc deserves especially to be cited here; and the celebrated conferences at the Luxembourg, over which he presided, exercised a powerful influence not only on the state socialists, who shared his opinions, but on men of distinctly different outlook, like Le Play.

As might have been expected, the political regime instituted after the *coup d'état* of 1851 was not favorable to the development of the social sciences. They received new momentum only when, with the decline of the empire, the great liberal minister Victor Duruy was

placed in charge of public instruction. Unfortunately the efforts of Duruy were openly or secretly thwarted. He was unable to carry through his plan for a section of juristic and economic science at the Ecole pratique des Hautes Etudes, which he founded in 1867. His only important creation in this realm was the establishment at the Collège de France of a course in the history of economic fact and doctrine, in charge of Levasseur.

In the course of the last half century the progress made by the social sciences in France, in the domain of teaching and also in public influence, has been reflected in a number of important innovations. These innovations have most frequently resulted either from social movements or from theoretical discoveries, exactly as in the course of the preceding century. Three events in the history of the Third Republic have especially contributed to the progress of the social sciences—the Franco-German War, the Dreyfus affair, and the World War. Each of these led to the creation of more or less important institutions. Following the Franco-German War the Ecole Libre des Sciences Politiques was founded, on the initiative of a man of large and penetrating views, Emile Boutmy, with the encouragement of Taine. This institution, as its name implies, took for its object the construction of the framework of French administration by means of the study of social facts. The Dreyfus affair, which shook the whole of France about the year 1900, provoked an important change in political orientation and at the same time a quick revival of interest in the social sciences. It expressed itself mainly in an intense movement to popularize social ideas and in a tendency to give greater prominence to the social factors in phenomena of every order. With this movement of ideas should doubtless be linked the meeting at Paris, in the year 1900, of the first international congress for the teaching of the social sciences, the establishment of an international library of the social sciences, and the creation of an Ecole des Hautes Etudes Sociales, founded in Paris on the initiative of Mlle. Dick May. The influence of the World War on the development of the social sciences was twofold. In the first place it drew eager attention to the relations between peoples and to all the problems involved in the League of Nations. As a result there came into existence not only numerous publications relative to the organization of peace, but various scientific institutions, some

French, like the Ecole des Hautes Etudes Internationales, founded in 1921 in connection with the law faculty of Paris, others of an international character, such as the Institute of International Law, or the Academy of Comparative Law, whose seat is at the Hague. In the second place, the events of the war and of the post-war period stressed the importance of economic factors and financial questions, and led to the multiplication of works and of periodical publications in this domain, as well as to the creation of new chairs of political economy and of finance in most of the institutions of higher learning.

In addition to the influence of these acute crises one must note the less easily distinguishable influence exerted on the progress of the social sciences by the sense of latent crisis which the machine age has, perhaps permanently, brought in its train. The parallel progress of capitalism and of socialism in France, and the elevation of syndicalism to a doctrine about the year 1900, combined powerfully to attract the attention not only of the masses, but of investigators, to an entire series of problems which, at about that period, were designated under the rather vague label of the "social question."

With varying sentiments and often with insufficient technical preparation, many thinkers attacked these problems with the object of resolving class antagonisms. There were socialist scholars who found their principal means of expression in a center of instruction, the Ecole Socialiste, and in the periodical, the *Revue socialiste*, founded in 1880 by Benoit Malon and interrupted by the war. The Ecole Syndicaliste had as its organ for several years the *Mouvement socialiste* of Hubert Lagardelle. More recently the communistic solution found expression in the *Revue communiste*, founded in 1920. On the opposing side the class in the moral and political sciences at the Institut de France remained for a long time the citadel of individualistic liberalism. Since then the institute has become hospitable enough to other schools of thought. The same kind of tolerance prevails in the domain of higher education. It is no longer accurate to say that the economic instruction of the law faculties or of the Collège de France spreads the so-called "classical" doctrines, as was the case during a certain period.

Between the two camps the Christian socialist movement, heir to the liberal and proletarian Catholicism of Lamennais, sought a solution

of social conflicts in the inspiration of the Gospels. This movement, alternately encouraged and disowned by the Holy See, continues to play a not unimportant role in political and social life. Its two principal organizations are the Sillon group, directed by its founder Marc Sangnier, and the Semaines Sociales, dedicated to the study of social problems.

Here should be mentioned the school of social conservatism inspired by Le Play, which exerted strong influence during the years 1860 to 1890. With this is associated the Musée Social, of which we shall speak again later on. The school of Le Play had as its principal periodical the *Réforme sociale*, founded in 1881 and directed by Demolins, continued since 1886 as the *Science sociale*.

As for the official instruction of the church, dispensed by its institutions of higher learning—notably in the Institut Catholique of Paris and the Faculté Libre du Droit at Lille, which in 1893 created a section of social and political science—it manifestly oscillates between these different trends. While certain professors agree with Le Play's individualism, or at least with his emphasis on the family, others like Boissard are frankly state socialists, and still others, like Paul Bureau, have tried to reconcile the two tendencies.

It would be possible to measure the influence which the works of scientists have exerted on the development of the social sciences, but this lies beyond the scope of the present discussion. We shall confine ourselves here to one of the theoretical efforts that has had the significance of a historic event for our sciences. We refer to the work of Emile Durkheim, professor of sociology at Bordeaux and later at Paris. Bringing his thought to bear on the very object and method of social science, he elaborated a doctrine with which were aligned more or less completely a certain number of philosophers, jurists, historians, economists, linguists, anthropologists and psychologists. This means that his influence radiated through all branches of social science. Durkheim and his disciples formed a coherent group whose influence on their contemporaries was powerfully served by a periodical, the *Année sociologique*, a collective product inspired by the spirit of positive and critical science, which appeared from 1896-97 to 1913 and began the publication of a new series in 1925.

The theories of Durkheim, attacked at first not only by philosophers but also by sociologists

like Tarde, who were fundamentally individualistic in spirit, are still debatable. Nevertheless no one questions that they represent at the present time the most vigorous and coherent effort to study human societies yet made in France. The title "French School of Sociology" can legitimately be conferred upon those who work in this spirit.

II. Let us examine now, from the standpoint of the present, the state of the social sciences in French speaking countries, and the place they occupy in higher education and in culture generally.

The social sciences in France have become too differentiated to admit of instruction conveying new results under the name of sociology. And it is just this fact, which we mention in passing, that contributed temporarily to the discrediting of the very notion of sociology. There was a time when certain pseudo-scientists bestowed upon themselves the title of sociologist, and learnedly enunciated pretended social laws which were quickly contradicted by more serious research. We have passed beyond that, fortunately. It does not follow that the teachings of general sociology are useless. Quite the contrary is true, but those who present these teachings no longer consider themselves obliged, or even authorized, to include the whole vast realm of the social sciences. Sometimes they seek the most general features by which to grasp these sciences and then proceed to construct a course in social methodology or morphology; or again they take a definite subject which they choose by reason of their own individual training, or of their particular personal preferences, and treat it in its methodological bearings. Chairs of sociology are quite rare. They are absent from the law faculties. There is one in the faculty of letters at Bordeaux and another at Toulouse, but there are no others in the provinces. Paris is somewhat better equipped. The Sorbonne has one; there is, besides, a course of sociology at the Institut d'Ethnologie. The Collège de France has a chair of social philosophy. Finally a course in sociology is given at the Institut Catholique and at the Ecole des Hautes Etudes Sociales. Students of sociology in France find a general medium for discussion in the *Année sociologique*, founded by Durkheim. The publication of this periodical was interrupted by the war and by the death of its founder, but was renewed in 1925 under the direction of Marcel Mauss. Around it, about the same time, a

scientific society was formed—the Institut International de Sociologie, whose members are for the most part collaborators on the *Année*. Kindred in conception but divergent in spirit and opposed to the ideas of Durkheim, the Société de Sociologie, which was organized in 1895 on the initiative of René Worms, publishes a periodical, the *Revue internationale de sociologie*, directed by G. Richard, professor in the faculty of letters at Bordeaux.

Leaving general sociology and passing to the study of the various individual social sciences, an initial difficulty awaits us. It concerns philosophy. To consider as social sciences all the branches of philosophy would be impossible. Some of them obviously include no social element. The question of social content presents itself only in the fields of ethics, psychology and pedagogy. In each of these sciences there is still an animated controversy between the individualists and the "sociologists." Each side, perhaps, could be given its due, for there are individual and social ethics, individual and social psychology, and individual and social pedagogy. Ethics considered from the social point of view has benefited especially from the work of Lucien Lévy-Bruhl (*La morale et la science des mœurs*, Paris 1903). A. Bayet has traced the historical development of ethics in a course of lectures given for the first time in the Ecole Pratique des Hautes Etudes in 1925. Social psychology is taught, notably by Halbwachs and Blondel, in the faculty of letters in Strasbourg. Finally social pedagogy, taught at the Sorbonne by Durkheim's successor Fauconnet has been a subject to which Binet, Simon and others have devoted themselves. The Musée Pédagogique, founded at Paris in 1894, is the center for all information concerning methods of instruction. In another Paris museum, of kindred purpose, an institute of professional orientation has been functioning for two years. It has two regional offices in the provinces. In this connection it should be noted that the new methods in experimental education (and in a general way all the rationalistic procedures, with the somewhat mechanical rigidity they require) find in France, which is a strongly individualistic country, less favorable ground than almost anywhere else.

In approaching history we find the same difficulty that confronted us in philosophy. Is history a science and, if it is one, is it a social science? Historians are, or are not, sociologists according to their intellectual tendencies, their

initial training, the subjects they study. They are far from agreement among themselves as to the place which should be reserved for collective forces and ideas. About 1900 the *Revue de synthèse historique* published a celebrated discussion of this subject which emphasized this fundamental disagreement. The historians Seignobos and Mantoux, the economist Simiand and the philosopher Rauh participated in it. Differences of opinion on the subject are still rife. The difficulties involved make it impossible either to include history among the social sciences or entirely to exclude it. To take an example, certain historians of Greek and Roman antiquity, like Gernet in Algiers, Glotz in Paris, Piganiol in Strasbourg, and others, allow a considerable place for social facts, while many of their colleagues—the larger number it seems—are inclined to envisage history as a succession of particular events. The same is true among historians of the Middle Ages and also among modern and contemporary historians. There are only three branches of history where the nature of the material compels the student to envisage facts from a social point of view, thus making a sociologist of him without his being aware of it. These are to be found in the domain of law and institutions, of religion and of ethnology.

The history of law in the larger sense includes also the history of institutions through ancient, mediaeval and modern times. Instruction in it is given especially in the law faculties, where the programs of study, after having for a long time disregarded it, now properly grant it a prominent place in the curriculum. Roman law is the only ancient juristic system taught. It is compulsory in the program of the first two years and in the studies required for the degree of Doctor of Laws (diploma of advanced study in private law). The other branch of historical instruction in the law faculties is that of French law, taught to first year students and to candidates for the doctorate (history of public law for the D.E.S. of public law, history of private law for the D.E.S. of private law). This instruction is given by professors known as Romance historians, averaging about three in number in the thirteen law faculties of the provinces and eight in the law faculty in Paris. The Paris faculty possesses, besides, a chair in the history of canon law which is duplicated at the Ecole des Hautes Etudes. For the sake of completeness it should also be mentioned that instruction in constitutional law

allows an important historical division, and that the chairs of comparative legislation which exist in some faculties, notably in Paris, are now occupied by incumbents who are permitted to give courses in the history of foreign law.

The law faculties are not the only ones which include the history of law. There are faculties of letters in which the history of Roman and of French institutions is taught concurrently, though from a somewhat different angle and in programs which change every year. Faculties are rare that do not provide instruction in Greek institutions, at least in outline. The Ecole des Chartes has a chair of French law and of canon law, occupied for a long time by Paul Viollet. Babylonian and Assyrian law is expounded at the Collège de France by Fossey and at the Ecole des Hautes Etudes Sociales by Scheil. France, remembering that she is an Islamic power, disseminates rather widely the study of Mohammedan law. This is taught in the Algiers faculty of law by Morand, and in Paris at the Ecole Coloniale and at the Ecole des Langues Orientales by Milliot. At the Collège de France a chair of Mussulmanic sociology is held by Massignon. The institutions of mediaeval England form the subject of a course of study at the Ecole des Hautes Etudes Sociales under Joüon des Longrais, the successor of Bémont. Contemporary Chinese law is expounded by Escarra at the Ecole des Hautes Etudes Chinoises, while in the same establishment Granet in his course studies ancient Chinese institutions.

That two courses in this domain have been eliminated must be noted with regret. The lectures at the Ecole des Hautes Etudes Sociales in which Thévenin studied Frankish law, proceeding thence to Germanic law, were not continued after his death. On the other hand the chair of comparative law of the law faculty in Paris has not proved a substitute for the chair dedicated to the study of comparative legislation at the Collège de France, discontinued at the death of J. Flach. The object of the two courses of instruction is not the same: the courses in the faculty of law have as their aim the comparative study of contemporary legislative systems, while the instruction at the Collège de France had in view rather the comparative study of ancient systems of law and, with the writings of some rare jurists in the field of comparative law, such as Rodolphe Dareste, was the only equivalent in France of the German *vergleichende Rechtswissenschaft*.

French interest in the history of law is manifested not only by teaching faculties but also by scientific societies specifically dedicated to this study. Chief among them is the Société d'Histoire du Droit, of which Paul Fournier is president. Similar groups exist in the provinces: the Société d'Histoire du Droit Normand at Caen, and the Société d'Histoire du Droit des Pays Flamands, Picards et Wallons at Lille. As for publications, it is out of the question to attempt to give even a summary list. We shall content ourselves here, and also when we reach the other social sciences farther on, with indicating the most important scientific periodicals. The leading journal dealing with the history of law is the *Revue historique de droit français et étranger*, founded in 1855.

Instruction in the history of religion is more or less centralized in Paris in the division of the Ecole Pratique des Hautes Etudes which has been especially dedicated to it. This division was created in 1886 in spite of the opposition of those who feared that scientific investigation was sacrilegious. Most of the religions practised today or in antiquity are studied objectively there, from the religion of uncivilized peoples (Mauss) to the history of Christian dogma (Alphandéry). Nevertheless at least one lacuna is noticeable in the lack of attention to the history of the Protestant religion. Among the courses of instruction at the Collège de France there are several which touch closely upon religious history: Loisy's on the history of religion, Moret's on Egyptology, and Sylvain Lévi's on Hinduism. The provinces are very badly equipped in this respect, and faculties of letters that give instruction in the history of religion are rare. One can cite only Strasbourg (Alfaric), Lille (Jeanmaire) and Aix (Toussaint).

There would be some injustice in failing to notice that the institutions of higher learning founded by the different churches almost always give an important place to the history of their own religion. This tendency is marked in connection with the Institut Catholique in Paris; the faculty of theology in Strasbourg; the faculties in Lyons, Lille, Toulouse and Angers which are independent of the official university system of the state; and certain *grands séminaires*. For Protestantism it can be seen in the faculty of Protestant theology in Paris, likewise independent. However remarkable the instruction given in these institutions may be on occasion, they will always, rightly or wrongly, be suspected of fostering apologetics.

A number of scientific societies have been organized for the study of the history of religion. The most important is the Société Ernest Renan, founded in Paris. The Ecole des Hautes Etudes Sociales publishes at irregular intervals a collection of the writings of its teachers and of its best pupils under the name, *Bibliothèque de l'école pratique des hautes études* (religious sciences). There is likewise a special periodical, the *Revue d'histoire et de philosophie religieuses*, founded in 1921. The study of religious origins has been enriched by a special museum built in Paris in 1885 and named after its founder, a Lyons merchant, Guimet. This museum, dedicated especially to iconographic representations of oriental religions, is directed by J. Hackin.

For reasons at once theoretical and historical, ethnology has remained, for the French school especially, the favorite stamping ground of sociology. Nevertheless, down to these last years, the teaching of ethnology remained somewhat scattered. In 1924, on the initiative of L. Lévy-Bruhl, an Institute of Ethnology was formed, in association with the University of Paris, intended to group and to coordinate the various branches of ethnology, ethnography, anthropology, technology, linguistics, study of animal societies, etc. The ensemble forms a cycle of studies for which a diploma is issued. Two scientific societies, the Institut Français d'Anthropologie, founded in 1911, and the Société d'Ethnographie, founded in 1859, have made the study of ethnological questions their special task. As for periodical publications, since the disappearance of the *Revue des études ethnographiques et sociologiques* only the *Anthropologie* remains. Ethnography, one of the branches of ethnology, has its museum, founded in 1895 and located at Paris in the Trocadéro Palace. It is directed by Dr. P. Rivet.

Passing on to the consideration of law as a social science, we find, as is natural, that it is taught mainly in the faculties of law. The subject is traditionally divided into private and public law, the former customarily including penal law and civil procedure which touches public law at certain angles. It enlists the services of a numerous personnel of professors or instructors (averaging six in each of the provincial faculties, fifteen in Paris). Civil law is given most prominence. At its side are ranged commercial and maritime law, criminal law, private international law and, in certain faculties, insurance, registering and compara-

tive law. This last branch of instruction is developed especially at the University of Lyons, where an institute of comparative law was created in 1922. The accepted methods of instruction in the law faculties have been modified and rendered flexible during the last half century, especially since the World War. They now more nearly approach the practise of the other faculties. If the professor still conducts his course in robes, this practise is almost the last vestige of their particularism. Indeed since the thoroughgoing reform of 1924, which consisted, above all, in the introduction of written compositions into the examinations, the course of study has become more difficult and more serious, and the student who "does his law" without serious work, a common type formerly, runs the greatest risk of failing in his examination. Contacts between student and professor are more frequent and more direct. Study rooms have been multiplied; direction of theses and of work has become more effective. To put it briefly, in this domain, also, instruction tends to become an initiation of youthful spirits into new disciplines and methods, rather than an effort to communicate revealed truth. At the same time, by a parallel evolution, the foundation of the instruction itself has become modified. The exegesis of the codes has been replaced by the study of juridical facts. The professor no longer considers the statutes as the only facts worthy of his attention. He directs his glance to the decisions of courts of justice and even to humble practise, and finds in them social facts which merit his observation.

While instruction in civil and penal law is given almost exclusively in the law faculties, certain branches of private law are taught elsewhere. Commercial law, for instance, is taught at the Conservatoire National des Arts et Métiers and at the Ecole des Sciences Politiques, not to mention the Ecoles Supérieures de Commerce, where instruction is given which perhaps rivals that of the faculties, and which is often given by the same teachers. Private international law is taught at the Ecole des Hautes Etudes Internationales. Among the scientific societies engaged in the study of private law or of certain of its elements, may be cited the Société des Etudes Législatives, founded in 1901, which undertakes to facilitate the task of parliament by aiding it in the drafting of legislation; the Société de Législation Comparée, founded in 1869, whose title sufficiently indicates its object; and finally the ancient and

celebrated Société des Prisons whose field of action overlaps that of penal law. In the provinces the Académie de Législation of Toulouse should not be forgotten. Periodicals devoted to private law are sufficiently numerous in France. We shall name only the most important. The *Revue générale de droit* bears at once on private and on public law. In the field of private law the *Revue critique de législation et de jurisprudence* deserves mention. The *Revue trimestrielle de droit civil*, founded in 1903, specializes in civil law; the *Annales de droit commercial* in commercial law; the *Journal de droit international privé* (founded by Edouard Clunet) in private international law. Along with these reviews should be noted the jurisprudence collections, or case books, in which many of the decisions emanating from the most important courts and tribunals are published and commented upon by professors of law and by jurisconsults. Several of these collections exist: the most celebrated are *Le Sirey*, started in 1831, and *Le Dalloz*, started in 1845.

The comments made above on private law apply equally to public law. Here also we witness a rejuvenation of methods in the exposition of the subject and in the doctrine itself; general public law, constitutional law, administrative law, public international law, public finance are taught in all the state law faculties, and most of them in the independent faculties as well. But it is especially the Ecole Libre des Sciences Politiques which here competes with the university. The preparation for high administrative positions (state council, diplomacy, inspection of finance, etc.) is very well organized there, and certain courses of instruction, such as the history of political ideas and doctrines, are given which one would seek in vain on the bulletin boards of the law faculties. In addition a whole series of courses, too numerous to list, allows a student to become acquainted with most of political science, without any serious lacunae. Public international law, which since the war has received such a sudden impetus, does not yet seem to have been given the place to which it is entitled in French law faculties. Instruction in it is still optional (but without doubt it will become obligatory before long). In any case this science is extensively taught at the Ecole des Hautes Etudes Internationales, an institution associated with the law faculty of Paris. The law of nations is likewise taught at the Ecole Libre des Sciences Politiques, not to mention such inter-

national schools as the academy at the Hague. Scientific societies properly called French, having as their aim the objective study of problems of public law, do not exist so far as we know. One could not thus describe the existing political groups, formed within the Parliament and outside of it, despite the generally high level of the work done there and the great value of some of it. The principal scientific reviews dealing with public law are the *Revue du droit public et de la science politique* (1894), and the *Revue de science et législation financières* (1903), both edited by Gaston Jèze, and the *Revue de droit international public*, edited by Geouffre de Lapradelle, Alvarez and Politis.

Among the social sciences political economy is without doubt the one in which widespread instruction has been most neglected. It took the stubborn efforts of Leveillé, about 1880, to gain an honorable place for it in the law faculties, and for a long time it was not treated in a truly scientific way. In this connection the Paris faculty seems to have been outdistanced by some of the provincial faculties. In any case the time has passed when instruction in political economy can be treated with disdain. The World War and its consequences have sharply drawn the attention of the public to the primordial importance of economic phenomena in modern societies. In the law faculties economic instruction is given by an average of three professors in the provinces and by fourteen professors in Paris, but public interest in economic questions has reached such a pitch that the number of teachers provided is no longer sufficient, especially in Paris, where the number of candidates for the economic doctorate already appreciably surpasses the number of aspirants for the degree of doctor of laws. This department of instruction comprises general political economy, the history of economic doctrines, working class legislation, rural legislation and colonial legislation. Certain faculties have courses in mining or public works legislation. Instruction in statistics, well organized in Paris in an institute of statistics, is unfortunately not given, so far as we know, in any of the provincial law faculties.

The law faculties are not the only places where economic science is taught. The Conservatoire National des Arts et Métiers possesses a chair of political economy, the oldest in France, made famous by the names of J. B. Say and of Blanqui, and at present occupied by F. Simiand. It has, besides, a chair of industrial

economy and of statistics (Liesse), another of economy and social insurance (Mabillean), a chair for the study of the organization of labor and of workingmen's associations (Aucuy), and finally a chair of economic geography (Hauser). The Collège de France likewise accorded quite an important place to economic science when it provided a chair of history of labor (G. Renard), a chair of cooperation (Charles Gide), a chair for the study of economic and social facts (Marion), and a chair of social work (Fuster). The Ecole Pratique des Hautes Etudes includes a department of economic history, too fragmentary a realization of the idea of Victor Duruy. This department of study is under the charge of Landry, Simiand, Pirou, Bourgin and Mathiez. At the Ecole Libre des Sciences Politiques numerous branches of economic instruction are represented. Finally we should add that a chair of political economy has existed at the Ecole Nationale des Ponts et Chaussées since 1846. Another chair may be found at the Ecole des Mines, and the Ecole Polytechnique has had since 1902 its chair of social economy. It is perhaps in the field of economics that scientific societies have developed most vigorously within the last few years. There are numerous groups that have set themselves the task of studying economic phenomena in their various aspects, but most of them are not of a truly scientific character, completely free from political, philanthropic or economic bias. We shall note only the Société de Statistique of Paris, founded in 1860, the Société d'Economie Politique, founded in 1842, and finally the Centre de Documentation Sociale, established at the Ecole Normale Supérieure. The principal French economic periodicals are the *Revue d'économie politique*, founded in 1887, the *Journal des économistes* and, in a more specialized branch of economics, the *Revue bancaire*. Economic history likewise has its periodicals, the *Revue d'histoire économique et sociale* and the *Annales d'histoire économique*.

Somewhat on the margin of political economy is urbanism, a new science, social *par excellence*. It is taught according to a simple formula, sufficiently recognized today, in an Institut d'Urbanisme (1925) associated with the University of Paris, and instruction there is given not only by economists but by professors of public law, by administrators, by architects.

Colonial questions are systematically studied in a special school, the Ecole Coloniale, as well

as in the law faculty of Paris and in the Ecole Libre des Sciences Politiques.

This rapid enumeration can not give any real idea of the present state of the social sciences in France. In order to complete the record many features would have to be added. Thus social hygiene and legal medicine, social sciences of the first rank, should have figured in it. They are taught in the faculties of medicine. In addition there is a chair of hygiene and the physiology of work in the Conservatoire National des Arts et Métiers.

It should be very clear from this exposition that the social sciences in France occupy an increasingly large place in the intellectual life of the country and require the efforts of a constantly growing body of investigators. At the same time it is evident that instruction in the social sciences is a thing of shreds and patches dispensed in various institutions by diverging methods and with differing, not to say opposing, purposes. If conformity in the social sciences means sterility, we in France are in no danger of suffering from this defect, and the time is still distant in this country when faculties of social science will be founded that shall be real institutions of higher learning divorced from all preoccupation with professional training.

III. To measure with precision the place occupied by the social sciences in public opinion would require a long and minute inquiry. In particular the curve of their progression would have to be established by means of a large number of charts and figures dealing with these sciences. There is no possibility of doing this statistical work here, even though at present it is facilitated by a very useful instrument, Grandin's *Bibliographie générale des sciences juridiques, politiques, économiques et sociales* (3 vols., Paris 1926).

Social science is elaborated for the most part in the scientific institutions of which we have spoken. One can do no more than point out some of the means by which it is spread and popularized. The first of these, and one of the most efficacious, is primary and secondary instruction. General sociology made its entrance into the programs of the normal schools as a result of the persevering efforts of Paul Lapie, a clear sighted administrator who was at the same time a philosopher-sociologist. The primary schools and *lycées*, though their programs are apparently unmodified, are making room for the social sciences through a kind of internal

evolution. The teaching of history tends to bestow an increasingly large amount of attention on the institutions of different peoples. Geography, formerly exclusively physical or political, is giving place to economic and human geography. Under the name of civic instruction public law is explained in history and philosophy classes, and the day is doubtless not far off when children will be made familiar with the principal ideas of political economy.

Graduate and technical instruction in all its forms has developed extensively in France since the Great War, and necessarily yields a certain place to the social sciences in its programs. However, there is an entire series of gradations observable between some village school-room, with its humble evening course, and such a rich, powerful institution as the Ecole des Hautes Etudes Commerciales in Paris, where the level of instruction is almost on a par with that of the faculties, and the teaching is often done by the same instructors.

Workers' education in the early years of the century gave birth to numerous *universités populaires* where scholars came to expound scientific questions. This was no more than a fire of straw, for the instruction, dispensed with more zeal than method, was ill adapted to those who came to receive it. The problem of workers' education has been taken up on a new basis, and is being carried forward in the *bourses de travail* under the aegis of the syndicates. It goes without saying that, especially since the war, economic, social and political questions have most frequently formed the subject of lectures, and have attracted the most eager audiences. Another institution similarly concerned with problems of workers' education is the Ecole des Coopérateurs organized by the Fédération des Sociétés Coopératives de Consommation.

Among the institutions in Paris which have set themselves the task of popularizing social science, we must mention the Collège Libre des Sciences Sociales and the Ecole des Hautes Etudes Sociales. The first, founded in 1895, comprises courses of study divided into three sections: historical studies, theory and method, and technology. The Ecole des Hautes Etudes Sociales, founded in 1900, comprises five sections: social science school; school of philosophy; school of journalism and of preparation for public life; school of advanced international studies; school of art. In the provinces we may mention the Institut des Sciences Sociales

at Lille, founded in connection with the university, which each year gives series of public lectures and confers the diploma of doctor of social science. It would be futile to try to enumerate all the discussions and lectures on social subjects. They are of all kinds and all colors, from popular lectures, or a discussion in the *Annales* by some academician who happens to be in vogue, down to the educational lecture given by some candidate during an electoral campaign. Related in idea and daily increasing in power, the press spreads popularized notions of social science among the public. Here again it is impossible to give precise details which would, at best, often prove misleading. It suffices to compare a daily newspaper of today with an issue of the same paper thirty or forty years ago, and to note the increased space given to social problems, foreign politics and economics. To name all the reviews which in this field occupy an intermediate place between the scientific periodical and the newspaper would be dull and uninteresting. We shall content ourselves with citing those of a particularly technical character, such as, in political science, the *Revue des sciences politiques*, published since 1886, and the *Revue politique et parlementaire*, founded in 1894; in economics, the *Information sociale*, which in 1922 succeeded the *Information ouvrière et sociale*; the *Revue des études coopératives*, founded in 1921; the *Documents du travail*, which have been appearing for twelve years and serve as the organ of the Association Française pour la Lutte contre le Chômage et pour l'Organisation du Marche du Travail.

A last means of propagating ideas in the social domain is the museum. This assumes two forms, the temporary exposition and the permanent museum. Neither form is very popular in France. Without doubt the universal expositions held in Paris—notably that of 1867 under the impetus given by Le Play, but the following ones as well, in 1878, 1889 and 1900—did accord a large place to social institutions, but for the last thirty years no exposition of this size has taken place, and the smaller expositions do not seem to have aroused a lively public interest. As for museums strictly so called, one must not, despite its name, consider as such the Musée Social, founded in 1896 by the Count of Chambrun. It is something entirely different—a center of information, of documentation and of truly scientific inquiry. The only institution which answers the defini-

tion of a real social museum is that of the Conservatoire National des Arts et Métiers, which is, above all, of historic interest.

IV. Instruction in the social sciences in Belgium is well developed, and succeeded at an early date in arousing public interest. As far back as 1830 political economy had been taught in the two state universities (Ghent and Liège), and in 1862 an association, international it is true, was created in Brussels under the patronage of Lord Brougham, Garnier Pagès and Michel Chevalier for the purpose of promoting progress in the social sciences. At present the study of these sciences is being actively furthered in each of the four universities (Ghent, Liège, Brussels and Louvain).

The fact that the teaching of the social sciences flourishes in Brussels is largely due to Ernest Solvay, a man of vision, at once an industrialist and a sociologist. In 1889 he founded an Ecole des Sciences Sociales, which was reorganized in 1901 and is at present an integral part of the University of Brussels. This school comprises twenty-two courses given by fifteen titular professors and divided into three sections (political, economic and social science). The Institut de Sociologie, also founded by Solvay (1901), publishes documents and is provided with a rich research library. It is a center of both instruction and research.

Among Belgian scientific societies devoted to the study of the social sciences, the most important is, beyond question, the Académie Royale de Belgique, with its section in the division of letters devoted to the moral and political sciences.

Switzerland is original enough to possess at Geneva a faculty of the economic and social sciences which forms no part of either the faculties of letters or of law. The following subjects are taught there: sociology, political economy, economic history, statistics, commercial economics, commercial technique, commercial law. There exists, besides, in Geneva, a special institution called the Institut J.-J. Rousseau, founded in 1899 and dedicated to the study of psychology applied to professional orientation. Geneva is also, as need hardly be added, the seat of numerous international institutions.

HENRI LÉVY-BRUHL

Consult: Hauser, Henri, *L'Enseignement des sciences sociales* (Paris 1923); Liard, Louis, *L'Enseignement supérieur en France*, 2 vols. (Paris 1888-94).

III

Germany

From the days of Thomas Aquinas, economic life was included in that complex of human experience which every *summa* and many scholastic monographs sought to organize and classify. The customary lectures on the moral sciences discussed economics side by side with political theory. Both of them were taught, however, merely as a part of the prevailing religious world outlook, observed facts being considered mainly from the standpoint of their compatibility with the teachings of the Bible, of the church fathers and of Aristotle.

Mercantilism, the economic doctrine of the new absolutist state, marked the transition of the discipline from theology to science. Not until the second half of the seventeenth century, however, did it produce a distinguished representative in the person of Johann Joachim Becher, and only in the first half of the eighteenth century did it gain admittance into the universities. Cameralism, the German variety of mercantilism, considered economic and financial questions primarily from the standpoint of the *camera*, or the prince's household. Nevertheless it produced some theoretical discussions and achieved conclusions which anticipated many of the doctrines of the English classical economists. While this is true for Johann Heinrich Gottlob von Justi and in a limited measure for Hörnigk, it by no means applies to economics as a university discipline. There economics, like politics and ethics, was taught as a part of practical philosophy and, in Schreber's words (1764), presented little more than a system of precepts for the master or the mistress of a household, for children and servants. Although Leibniz had already strongly emphasized the importance of economics and Thomasius had insistently demanded the establishment of an economic professorship, it was not until 1727 that a separate *Profession in Oeconomia, Policy und Cammersachen* was founded at the University of Halle. Even then the intention was not to develop a science of economics but to promote the training of state officials. Frederick William I, who established in the same year an economics chair at Frankfort on the Oder, considered eco-

nomics as the science of rational management of both private and public economic affairs. He hoped to remedy the evil of "poor economy" practised by many youths who were burdened with debts at the completion of their university terms; at the same time he favored such "politica, oeconomica und cameralia" as might be really useful as an indispensable preparation for the academically trained administrator in the age of mercantilism.

A more intensive study of economics at the universities and an increase in the number of professorships came only gradually and after numerous setbacks. It is significant that for some reason (probably his refusal to embrace Catholicism) Justi failed in 1752 to receive a position intended for him at the Vienna Theresianum, and though as police commissioner of Göttingen in 1755 he was allowed to give lectures, this teaching appointment was conferred only two years later upon a professor of natural history and chemistry. However, it is important that Germany had six professorships at the time when the physiocrats brought about the establishment of the first chair of economics in France. In the last quarter of the eighteenth century the increase in Germany was more rapid, so that by 1798 twenty-two higher institutions of learning had chairs of economics.

Although the physiocrats had remarkably little effect upon science in Germany, yet indirectly their writings provided the stimulus for the founding of the first school of cameralistics, the Kameral-Hoheschule in Kaiserslautern in 1774. Despite the hearty welcome given it by the *Ephémérides du citoyen*, this was not as yet a school of economics in the modern sense. Coordinate with, indeed superior to, the professor of agriculture, commerce, finance and administration was the professor of natural history, chemistry, pure and applied mathematics, architecture and mining. Instruction took no cognizance of the new tendencies in science but was still guided entirely by the old cameralistic aims. Nor did the removal of the institution from Kaiserslautern to Heidelberg effect any change. The establishment of an economics

faculty at the University of Giessen seemed of greater promise, for the government of Hesse summoned the most distinguished German physiocrat, Johann August Schlettwein, to the newly founded chair of economics. But his activity there lasted only for about a decade (1777-85); moreover he was not essentially successful there as he had been earlier at Karlsruhe and Basel. Since all attempts to develop German economic science thus died in their infancy, it remained for the *Wealth of Nations* to make the decisive break and to launch modern economics in Germany as elsewhere. The adaptation of Adam Smith's economic principles and the controversies they aroused determined the fortunes of economics in German universities for nearly a century.

Like Quesnay and his followers in France and Ricardo and John Stuart Mill in England, the great German economists also lived outside the universities, and were indeed often antagonistic to them. Johann Heinrich von Thünen developed and applied his doctrine of localization as a practical agriculturist. Karl Rodbertus was likewise a Prussian landowner. Friedrich List, the gifted opponent of cosmopolitan classical political economy, did, to be sure, teach at the University of Tübingen for a short period in his youth; but at the time he wrote his treatise and the great political essays, he had no official or professional standing and found academic science no less hostile than bureaucratic politics. Karl Marx early gave up the idea of qualifying as professor and in his theoretical writings he sharply attacked university science; the universities in their turn ignored his contributions to theory and banned him for decades on account of his hostility to the state.

The peculiar course of German economics since the forties has been largely determined by the fact that when opposition to the classical school developed among the professors, it was based on methodological and philosophical grounds propounded by the historical school rather than on specific theoretical disagreements like those of F. B. W. von Hermann, Theodor von Bernhardi or H. K. E. von Mangoldt. Ranke and Savigny, Jakob Grimm and Otfried Müller were the spiritual descendants of Herder and the romanticists, who among other things aroused the feeling for natural "organic" growth of an individual and of a nation, and who substituted for a mechanistic explanation an organic-intuitive "understanding" connected with an appreciation of the intangible forces of nation-

ality and national spirit. This new method of historical interpretation, which was developed first in other sciences, provided subsequently the necessary impetus for economics as well. From this vantage point Karl Knies, Wilhelm Roscher and Bruno Hildebrand recognized the weakness of the classical position, its lack of a historical sense, its consequent "cosmopolitanism" and "perpetualism" and conceived in broad outlines a program of "political economy from the standpoint of the historical method" (Knies, K., *Politische Oekonomie vom Standpunkt der geschichtlichen Methode*, Brunswick 1853, 2nd ed. 1883).

After the appearance of these three men, the so-called historical school of political economy held almost undisputed sway at the German universities down to the end of the nineteenth century. The content of instruction, however, did not remain stable. It experienced a significant change with the rise of the younger generation of Schmoller and Wagner, Brentano and Knapp, Held and Gothein, who combined political inferences and recommendations with their historical knowledge to a greater extent than their predecessors. The usual lecture on practical political economy often became a lecture on economic politics in more than name; norms of economic policy and even of social policy formed an important part of the lecture content. Because the classical theory was seen to be inconsistent with historical or contemporary life, and because the continuance of social misery was known to threaten state and society with revolutionary cataclysms, it was inferred that the task of science is not only to explain but also to solve the social problem.

This new trend of university economics, which its opponents characterized as "socialism of the chair," did not lead to a reorganization of the faculties nor to a specialization of professorships in distinct disciplines. Financial arrangements provided for continuous functioning of only two full professorships at any but the large universities of Berlin and Munich and hence forced the professors to give successive large lecture courses on general and practical political economy, finance and later also on economic history, in addition to occasional special courses which were ordinarily left to instructors of lower rank. However, this was merely one factor in the situation. More important in the present context is the fact that since all courses had history as their common basis, the need of specialization appeared less urgent than in the

Anglo-Saxon countries. The usual course of theoretical economics given by adherents of the historical school, and also by theorists like Adolf Wagner, propounded not abstract doctrines but a historical and sociological economic theory. The relation between theoretical and practical economics was therefore not one of complete contrast and mutual exclusiveness in subject matter; on the contrary, the latter made practical application and drew conclusions on matters of policy from the teachings of the former.

Intensification, not specialization, was therefore looked upon as the method for the further development of teaching and study. This was the purpose of the seminars which were organized to supplement lectures in the middle of the last century and which served above all to unite upper classmen and their teachers in working groups. The seminars of Hildebrand, Knies and Ernst Engel of the older generation and, more recently, those of G. F. Knapp and Gustav Schmoller attained to eminent distinction as centers of scientific training.

For a multiplicity of reasons the first decade of the twentieth century marked a change and inaugurated a transformation in faculties, in subject matter and in methods of instruction, a process which is still in progress. The impetus came from a group of scholars who, under the leadership of Max Weber and Werner Sombart, attacked the confusion of ethics, politics and economics characteristic of both the older and the younger historical schools and espoused the cause of emancipating the social sciences from value judgments. This movement was the inevitable result of the thorough inculcation of the relativity of all values by the historical school. With the laying bare of historical roots and limitations of all values, all divergent value judgments seemed equally justifiable and comprehensible. Therefore science could be kept out of the conflict of opinions, philosophies and parties only if every judgment of value were tabooed as unscientific. It was no accident that the old names "Volkswirtschaftslehre," "Nationalökonomie" and "Politische Oekonomie" became objects of suspicion. To be sure they were not entirely superseded. It is significant, however, that the great compendium which began to appear under Max Weber's direction and which was designed to replace a similar older work edited by Schönberg, was entitled *Grundriss der Sozialökonomik* (Tübingen 1914-) rather than *Handbuch der politischen Oekonomie*

(3 vols., Tübingen 1882-85). By their origin and also by the meaning of the single words of which they were compounded, the old terms pointed to a political and national emphasis; the new name in its colorless generality seemed exactly right for the new "objective" science, divorced from all judgments of value.

At about the same time theoretical interest was reawakened and theoretical work resumed. While the historical school was at its zenith the rationalistic and pure theory trends had not developed. Only a few scholars such as Lexis, Dietzel, A. Wagner, Neumann, Diehl continued in this period to build on the basis of the classical and the German theory; the new marginal utility doctrine of the Austrian school had exercised no substantial influence for an entire generation. But now the Anglo-American and the Austrian schools came to the fore in Germany (Schumpeter, Lederer) and theory was being developed even by adherents of the historical school (Spiethoff, Sombart, Alfred Weber, Plenge). Important contributions to theory were also made by the individualistic-liberal and individualistic-socialist groups (Liefmann, Oppenheimer), by Marxist revisionists (Lederer, Heilmann) and by the new universalistic school (von Gottl-Ottlilienfeld, Spann).

The rise of sociology in Germany also falls within this period. Of course the nineteenth century did not lack men of great sociological penetration. Nietzsche and Jakob Burckhardt, Ranke and Droysen, Schmoller and Gothein, intellectual leaders and scientific lights of varying brilliancy, often had a more profound sociological grasp of such large entities as peoples, epochs and cultures than professional sociologists attain in a lifetime of work. But a distinct science of sociology was not developed at that time. The works of Auguste Comte and Herbert Spencer had only slight influence; Lorenz von Stein's attempt at a doctrine of society foundered in contradictions from history; Ferdinand Tönnies' work of genius, *Gemeinschaft und Gesellschaft* (Leipsic 1887), in which he boldly created the fundamental concepts of German sociology, was not appreciated for twenty years. With the turn of the century the sociological work of philosophers and economists laid the foundation for the new science in Germany. Simmel's sociology and the work of Max Scheler showed how much sociological insight was to be gained from psychological observation and phenomenological explanation; the writings of Max Weber and Sombart, Alfred Weber and Oppenheimer,

showed with what subtle sociological sense leading economists interpreted the problems of the establishment and operation in society of the various cultural phenomena. A "formal" or "materialistic" sociology developed alongside of this more philosophical sociology. Methodologically akin to American researches, the new discipline of social relations (von Wiese) scrutinized many social formations in order to discover the underlying principles of association. Anthropology was also influenced by the new sociological trend, and the excellent work of the nineteenth century in primitive organization (Bachofen) was continued and supplemented by studies of primitive peoples and cultures (P. W. Schmidt, Thurnwald, Graebner).

The rapid increase in the subject matter of social science seemed to doom the old university practise which required every lecturer to treat all branches of social science or at least to be capable of doing so. Indeed, Max Weber declared separation into special disciplines essential, practically inevitable, and was certain that future developments would make the German university resemble the American institution. The rich variety of contemporary German social science can be properly understood only if it be borne in mind that Max Weber's prophecy was not fulfilled. Although the pressure of various mutually opposed trends resulted in a loosening up of the old academic scheme, it did not bring about specialized separation of all disciplines and chairs. It is significant that only a few German universities have professorships in sociology—Tönnies was *Privatdocent* up to his fifty-fourth year; Max Weber did his sociological writing when illness caused him to retire; Alfred Weber gave his sociological lectures as ordinary professor of political economy. The same condition prevails in other fields. During the last twenty-five years problems of the manufacture of credit (Schumpeter, Hahn) and business conjuncture and crises (Spiethoff, Lederer, Löwe) have been subjects of intensive investigations; but no special professorships for currency and credit or for business cycles were founded. Of the group of older disciplines only public finance showed a strong, widely recognized tendency toward separation in teaching and teachers. Of the newer subjects international economics, which is still associated chiefly with the person of Bernhard Harms, has attained the dignity of a separate discipline; so also has the economics of private business enterprise with all its subdivisions. Because the

latter had been developed as a special subject at the new higher schools of commerce, it was continued as a special subject when the schools at Frankfurt and Cologne were converted into universities.

Although the recent expansion of the social sciences has not resulted in a pronounced specialization, it has separated them more distinctly from the related disciplines of philosophy and history, and has emphasized their practical applications. In many cases the teaching of the social sciences was transferred from the faculty of philosophy to the law faculty; this is in line also with the general tendency toward an ever closer association of law and social science in education for public life. In other cases social-scientific instruction was entrusted to newly organized faculties of law and political science and, in less frequent instances, to special economic and social science faculties. A great deal of social science, particularly of applied and business economics, is being taught at present in the higher schools of commerce. Their number has increased considerably and their teaching program made broader so that the best of them differ little from the economic faculties of the newer universities. Owing to the traditional freedom of teaching and to the immunity from removal that professors enjoy as state officials, the question of the identification of the social science disciplines with a particular faculty is merely a matter of formal university organization. Its significance is limited to exposing the faculty members to a particular type of intellectual contact, and to the influence it may exercise on the choice of supplementary subjects by the students. It may explain, for instance, the relative neglect of philosophical and methodological disciplines by present day students who major in social science.

Another indication of the tendency to separate and to standardize the instruction in social science is the establishment in 1923 of a uniform examination in all federated German states for the diploma of *Volkswirt*. The significance of such a measure will appear more clearly if it is realized that the German student enjoys complete freedom in the choice of courses and in the sequence in which he attends them. The object of the new examination is to make more uniform, purposeful and intensive the course of study followed by the average student. The examination, taken after the completion of six semesters of social science, is both written and oral. The written part consists of an essay on an assigned

subject, prepared within a period of six weeks, and of two examination papers, one on an economic and the other on a legal topic. The oral examination covers general and special economics, public finance, statistics, business administration (for which may be substituted economic history or economic geography or the law of industrial relations), elements of civil and commercial law, general political science, and constitutional and administrative law. When a student passes the examination he becomes a candidate for the degree of *Doctor rerum politicarum* (or *Dr. oec. pub.* at Munich). This is awarded after the completion of two additional semesters of social science work, the presentation of a rather extended piece of independent scientific research and the passing of an examination covering the four principal subdivisions of economics and jurisprudence.

Since the establishment of the new degree, the doctorate in philosophy, which used to be frequent before, is now awarded only by a few outstanding universities (such as Berlin and Heidelberg) and only to those who specialize in the more theoretical phases of social science. The dissertation presented for this degree must deal with either economic or sociological theory and the examination covers theoretical and applied economics, sociology, and two supplementary subjects taught in the faculty of philosophy, generally philosophy and history. As a result the course of study of a candidate for the doctorate of philosophy is also somewhat different: he does not display as a rule an interest in business economics or practical law, but attends instead many more lectures on philosophical and historical subjects.

A tendency toward the democratization of faculties and the stimulation of research by financial assistance may be discerned in another post-war change affecting the teaching personnel. The teachers in German universities are divided into several groups: there are the ordinary or full professors, who give the large lecture courses basic for the faculty in question; lower in rank are the extraordinary professors, who may or may not be full-fledged faculty members; finally there are the *Privatdozenten* (private lecturers) and private persons engaged for special courses. The rank of *Privatdozent*, which is the first step in the academic ladder, is open to any university graduate who qualifies on the basis of a published book and of a special oral examination given by the entire faculty. The compensation for his lectures is limited en-

tirely to students' fees. Even under ordinary conditions this arrangement provides little financial security; but during the inflation period it proved entirely unsatisfactory because it resulted in a one-sided selection of persons of wealth for academic work. To remedy this evil two measures were taken. In the first place fellowships were granted to a limited number of *Privatdozenten* to tide them over until they should receive a paid appointment. The second change was the provision for an increased number of paid positions for assistants in research and teaching. Although a paid assistant may teach as a *Privatdozent* in his own right, he is ordinarily either a research worker or less frequently an assistant instructor taking over the more elementary portions of his superior's work.

Paid assistantship is not the only link between research and teaching. In Germany, as in other continental countries, an overwhelming proportion of research in the social sciences is done in the universities or at least in association with them. Such a relationship is strengthened by the fact that successful and voluminous research work is a prime qualification for an academic career. In addition to the scholarly labors of individual professors, the seminars were in the pre-war period responsible for a large share of the research output. At present more importance attaches to institutes forming an integral part of the universities or at any rate affiliated with them. The institutes are for the most part permanent organizations with a managing director and paid assistants. All of them have more or less specifically defined fields of research, some specializing in problems restricted to a definite region. The Institut für Weltwirtschaft und Seeverkehr at the University of Kiel, the best organized of them all, has influenced the development of similar organizations. Institutes of some size exist at the universities of Berlin, Breslau, Cologne, Frankfurt, Hamburg, Heidelberg, Königsberg, Münster, etc., and also at the Nuremberg school of commerce. The Institut für Konjunkturforschung at Berlin is the only institute not affiliated with an institution of higher learning. It is a part of the central statistical bureau of Germany and is engaged in a scientific treatment of statistical materials in order to elicit results of both theoretical significance and practical value.

Research by scholars with academic standing is not entirely confined to universities and associated organizations. A great deal of historical research has been done through the academies

of sciences and similar institutions which exist in several German states; their work was more important for the social sciences before the appearance of special research institutes within university walls. Many local associations for the study of specific subjects or for the correlation of science with practice also stimulate research work. Finally the learned societies of national scope bring about greater coordination of the researches of individual scholars and provide a publishing outlet for its results.

The Verein für Sozialpolitik is perhaps the oldest and most important of the learned societies in the field of social science. It was founded in 1872 in order to effect a wider acceptance of "socialism of the chair" in both theory and practice. In 1881, after Bismarck had definitely fixed the trend of the government's social policy, the society discontinued its attempts to influence general public opinion and sought instead to provide a basis for scientific discussion through extensive research. The meetings of the society, first annual and later biennial, provided the forum for an interchange of scholarly opinion. Gustav Schmoller, one of its founders and its president from 1890 until his death in 1917, decisively influenced the viewpoint of the society for nearly half a century. Under his successor, Heinrich Herkner, an increased interest in theoretical and financial questions led to the establishment of a separate subcommittee to deal with them. The society publishes a series of *Schriften* (175 vols. have appeared since 1879), which contain reports of proceedings as well as the results of research of the individual members. Although discussions of practical social and economic questions predominate in this collection, its range is really much wider than problems of German social policy. Alongside of studies on farm labor and handicrafts in Germany, one finds articles on the commercial policy of the principal countries, on French and American trade unions, on German financial and monetary problems and on international cartels.

A learned society whose prominence is of more recent date is the Deutsche Gesellschaft für Soziologie, established in 1909 and honored by the presidency of Tönnies. Its membership is limited to persons with a well-established interest in sociology. It is of service to science mainly through its conventions, in which all schools of thought are represented and the proceedings of which are published in full. The discussions in these conventions range over a wide variety of problems, taken from the formal

as well as empirical, psychological as well as cultural, branches of sociology. Side by side with topics like the relation of technology to culture or of law to economic life, the conventions discuss the sociological significance of nationality and of revolution, or the metasociological question of understanding. Since 1926 special groups have met in addition to the general convention. They consist of professional scholars and deal with a limited branch of sociology, such as the methodology of the social sciences (Sombart), anthropological sociology (Thurnwald) and the science of social relations (von Wiese).

The Friedrich List Gesellschaft is more than a learned society. Established in 1925 and directed by its president, Bernhard Harms, it seeks to bring about a collaboration of scholars and men of affairs in order to furnish carefully thought out solutions of current economic and social problems. Its task in the publishing field is to arrange for a complete and authoritative edition of the works of Friedrich List and to stimulate interest in the history of the social sciences by the publication of numerous series of studies. So far two volumes of the List edition have appeared; the proceedings of two important conventions, *Deutsche Verkehrsprobleme der Gegenwart* and *Das Reparationsproblem*, have also been published.

It will be observed that none of the series of studies described above represents the product of a definitely articulated school of thought. With the single exception of *Deutsche Beiträge zur Wirtschafts- und Gesellschaftslehre*, founded by Othmar Spann and Georg von Below and having a pronounced universalist viewpoint, contemporary Germany does not possess a publication which serves as the center for a recognized school or tradition. These series of studies, if they are more than compilations for convenience in publishing, are as a rule characterized more by external limitations than by adherence to a definite viewpoint. The series of dissertations published by some universities (Munich, Jena, Greifswald, etc.) or by a combination of several universities (Badische Hochschulen), or the *Sozialwissenschaftliche Forschungen*, a series of the best dissertations prepared at any German university, display obviously a wide variety of viewpoints. Some series confine themselves to dissertations prepared under a single professor; these of course are bound to possess a greater uniformity of outlook. Of such character was the old *Staats- und sozialwissenschaftliche Forschungen*, edited by Schmoller and affiliated

definitely with the younger historical school. Another rather external limitation which may characterize a series is that of the range of subjects treated. Of this type are the *Probleme der Weltwirtschaft*, edited by Harms, and *Finanzwissenschaftliche und volkswirtschaftliche Studien* founded by Karl Bräuer for a serious discussion of public finance in post-war Germany.

The observations made about these series of studies are equally applicable to present day social science periodicals in Germany. The contrast with the situation in the nineteenth century is well marked. Although functioning under flexible limitations as to the branch of sciences which it attempts to serve, a modern German periodical welcomes as a matter of principle scientific contributions of all schools and methodological orientations. Nevertheless a keen observer would still detect certain characteristic differences. For instance, *Schmollers Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im deutschen Reiche* (est. 1877 as quarterly, ed. by Schmoller 1881-1917, bimonthly since 1925, present editor A. Spiethoff), once the leading organ of the younger historical school, still remains the recognized center of publication for all research in the field of historical and empirical theory of economics and politics. Likewise the *Archiv für Sozialwissenschaft und Sozialpolitik* (bimonthly, est. 1904, present editor Emil Lederer), once edited by Max Weber and Werner Sombart in the spirit of "emancipation from value judgements," is distinguished today by habitual recurrence of rationalistic-theoretical, sociological and socialistic studies. Yet these distinctions are neither fundamental nor permanent. It is significant that editors of one periodical regularly contribute to other rival periodicals, a situation scarcely conceivable before the war.

In addition to *Schmollers Jahrbuch* and the *Archiv*, one must note the *Zeitschrift für die gesamte Staatswissenschaft* (bimonthly since 1926, est. 1844 by Robert von Mohl, numbering among its editors Schäffle, Schönberg, A. Wagner and Karl Bücher; present editor Georg Brodnitz), equally wide in scope, embracing all branches of social science. Somewhat more limited to economics with an emphasis on its practical and statistical aspects are Conrad's *Jahrbücher für Nationalökonomie und Statistik* (monthly, est. by Bruno Hildebrand, ed. 1872-1915 by Johannes Conrad, present editor Ludwig Elster), and the *Weltwirtschaftliches Archiv* (quarterly, est. 1913), organ of the Institut für

Weltwirtschaft und Seeverkehr and edited by Harms. The *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* (est. 1903 by St. Bauer, G. von Below and L. M. Hartmann, the first of whom is still editing it) is the outstanding German periodical in the field of economic history. *Finanz-Archiv* edited since its establishment in 1884 by Georg Schanz, is a semi-annual periodical of international reputation, cultivating a special branch of economics. There has been a large recent growth of periodicals devoted to the new science of business economics and management. The outstanding ones are *Annalen der Betriebswirtschaft* (quarterly, est. 1927, ed. by A. Heber), *Zeitschrift für Betriebswirtschaft* (monthly, est. 1924, ed. by F. Schmidt) and the older *Zeitschrift für handelswissenschaftliche Forschung* (monthly, est. 1906, ed. by K. Schmaltz). The *Allgemeines statistisches Archiv* (quarterly, est. 1890 by Georg von Mayr, ed. by Friedrich Zahn) is the leading periodical dealing with general statistical problems. Political science in its theoretical and empirical aspects is stimulated by articles in the *Archiv des öffentlichen Rechts* (quarterly, est. by Paul Laband, ed. by G. Holstein, O. Koellreutter and H. Triepel) and in the *Vierteljahrschrift für Politik und Geschichte* (est. 1923 as *Archiv für Politik und Geschichte*, ed. by Hans Roeseler). The important sociological magazines are *Kölner Vierteljahrshefte für Soziologie* (est. 1921; L. von Wiese is one of its editors), *Zeitschrift für Völkerpsychologie und Soziologie* (quarterly, est. 1925, ed. by R. Thurnwald) and *Ethos* (quarterly, est. 1925, ed. by D. Koigen, F. Hilker and F. Schneersohn). The socialist periodicals *Sozialistische Monatshefte* (monthly, est. 1896, ed. by Joseph Bloch) and *Die Gesellschaft* (monthly, est. 1924, ed. by Rudolf Hilferding) often contain scholarly articles on various social-scientific problems. Finally it must be mentioned that many research institutes publish periodical bulletins and that serious studies can often be found in the more specialized periodicals dealing with practical problems of business, public finance, trade unionism and cooperation.

In summing up we may observe that neither as teaching disciplines nor as research programs do the social sciences in contemporary Germany display uniformity of viewpoint or of method. A new synthesis of theory, history and practical studies is sought on every hand, but there has not developed a dominant tradition nor has a generally acknowledged leader appeared. Under the old faculty designations and in the new re-

search institutes, through societies and periodicals, each new trend develops its own doctrines and hopes to bring about their general acceptance.

EDGAR SALIN

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IV

Austria and Hungary

I. AUSTRIA. This section refers only to the territories comprised in the present Austrian Republic. In most of the other regions of the former empire the social sciences have developed not only in a foreign language but in a fundamentally divergent spiritual environment as well.

Austrian and German social science research have always been associated in the closest kind of interrelationship. Most of what can be said about the social sciences in Germany is applicable to Austria as well: the ethnic and linguistic kinship has proved distinctly a stronger influence than the political separation. To avoid repetition we shall in this section place the emphasis on those viewpoints in which Austrian social science research diverges from the general German stream, and thereby reveals distinctive Austrian traits.

The contrast between south German Catholicism and north German Protestantism, and the fact of Austria's political separation, have always been the two most important causes of occasional divergences between Austrian and German social science currents. The political mission of the former Austrian Empire was to unite in a state a multiplicity of historically and nationally quite heterogeneous peoples: this endeavor emerges consistently in Austrian social scientific thought. We can perhaps observe it most clearly in the social science echo of the romantic movement. The German romantic movement, which lifted German culture out of the general stream of the European Enlightenment, directed the social sciences toward an essentially idealistic and, beyond that, a nationally conditioned historical viewpoint, while in Austria it evoked social science theories that were partially rationalistic in motivation and absolutist and centralizing in tendency.

In the practical execution of her centralistic political aspirations Vienna could not afford to stress too strongly either the historic or the juristic point of view, for she had to curb a multiplicity of nationalities which stood on the soil of their own rich historic and juristic traditions. The political union of the Austrian

peoples seemed firmly grounded only on the plane of economic unity. So the former Viennese government missed no opportunity of bringing out the idea of reciprocal economic advantages and of planting it deep in the consciousness of its subjects. Small wonder, therefore, that economics became the central point of Austrian social science research at a comparatively early date. Moreover we find here the reason why economics as a subject of instruction has from the beginning belonged to the law and political science faculty of Austrian universities.

The development of Austrian economics and finance down to the present day reveals three flourishing periods quite clearly. In the first period the political viewpoint in its distinctively Austrian character played a leading role. When in the second half of the seventeenth century mercantilistic ideas began to penetrate into German speaking areas, an active group of nationalist economic writers was formed about the Viennese court, which brought out very sharply the fundamental idea of all mercantilism, the economic emphasis on the absolute monarchy. In the history of thought these writers are called the south German Catholic branch of the cameralists. Generally speaking, neither physiocracy nor the individualistic liberalism of the classical school succeeded in fruitfully stimulating Austrian economic thought, for the liberal current was in direct opposition to the Hapsburg state. So much the more would conservative and interventionist viewpoints in economic research necessarily flourish in the Viennese environment. The absolutism of the Holy Alliance greeted them with open arms. It is, however, decidedly significant that the historical school itself, which after all sprang from romantic thought, received comparatively little attention in Austria. Researches in economic history were likely to remind the different peoples of the monarchy of their former political independence. It was necessary to turn their attention in exactly the opposite direction toward the present and the future, toward the economic advantages to be expected from their political union by reason of a

division of labor and mutual aid. The rationalistic, thoroughly abstract, deductive system of thought which brought forth the theory of marginal utility was admirably adapted to this purpose, and that explains why it could flourish so exuberantly in Austria.

Perhaps the two decades before the World War, when the Austrian marginal utility school stood at the height of its power, are at the same time to be looked upon as the Golden Age of Austrian social science research. Not only did the Austrian marginal utility theory celebrate a triumphal progress geographically over extended foreign territories; it pushed forward into neighboring regions of thought as well, and inspired the hope that the struggle over method which it involved would raise economics to uncontested leadership among all the social sciences.

With the breakup of the Austrian Empire after the World War, the efforts of the earlier, characteristically Austrian research to support it theoretically likewise disappeared. At first German nationalism raised its head, and forces hitherto suppressed were developed in a thoroughly organic, speculative economy. This fresh new current is called universalism. It delves consciously into the organic thought treasure of former times, but especially into the economic doctrines of the romanticists, and stands in sharp opposition to the individualistic traditions of the marginal utility school. The present status of Austrian economic research is characterized by this struggle.

Sociology in Austria has always developed in the wake of economics; economic changes are mirrored rather consistently in Austrian sociological thought. West European influences predominated to about the time of the World War; the individualistic and partially mechanistic trend of the marginal utility theory was favorable to the positivistic and rationalistic doctrines of sociology. Since the World War new currents have appeared in two directions. In the first place the reaction against the marginal utility school emerges in the realm of sociology with a purely conceptual universalist system of thought which is recognized even beyond the boundaries of Austria. No less important is the second current which emanates from the philosophy of law and develops the principles of sociology on the basis of neo-Kantian ideas.

As in economics, so in the science of law and in other political sciences Austrian development has been closely bound up with the

centralizing aspirations of the Viennese government. The intention of bringing, so far as possible, the various peoples of the monarchy closer together by means of a uniform system of law led to early codification which played a significant part not only within the monarchy, but also within the whole domain of German law. Hence it is that in Austrian juristic research the dogmatic viewpoints of positive law have been strongly predominant since the beginning of the last century. After the World War neo-Kantian law philosophy took a sudden rise in Austria—we have just referred to it in connection with sociological research. The effort was made to grasp the essence of the law concept on purely idealistic grounds, and thus to establish its connection with positive law, the function of which consists only in determining content.

During the period of imperial government Austrian statistical research enjoyed a very favorable environment. As early as the seventeenth century the Viennese government sought to facilitate its centralistic activity by statistical compilations. So in the eighteenth century it enjoyed the prestige of having for the first time carried through a general census for a large country at one and the same time and with one and the same viewpoint. In 1829 an administrative statistical service was organized in Vienna. In 1863 it was enlarged into a central statistical commission, which since 1921 has continued its very active work as a national statistical office. The activities of this office have made possible the various branches of statistics that have flourished in Austria. There are, in addition to figures dealing with population and nationalities, several kinds of statistics bearing on administrative and economic problems. Statistical research at the universities has always been in closest relationship with official statistical work. Courses in statistics were given at all Austrian universities as far back as the beginning of the last century.

Of any distinctively Austrian historical research it would be difficult to speak in a methodological sense; interrelations with German science are so strongly developed here. In general special features are the result only of objective specialization on cycles of problems which are particularly important in Austrian history. Thus the question of nationalities has always received much attention. The series of events in the rise of the house of Hapsburg have also been always in the foreground. In a measure the pan-

Germanic idea emerged rather sharply. Research and critique of mediaeval archives flourished at the University of Vienna beginning with the end of last century. Perhaps, however, Austrian historical research has matured its most valuable fruits in the domain of economic history—another proof of the central position of economics in the framework of Austrian social science. Austrian intellectual history has also had several notable triumphs to record recently.

Some of the marginal social science disciplines succeeded in taking root in Austria with most favorable results. The wealth of the Hapsburgs permitted the flourishing of the imperial museum collections and therewith of archaeology, while aesthetic research has been stimulated by the general love of art in Vienna. The ethnic and linguistic heterogeneity of the former monarchy presented an admirable foundation for philological study and, in partial connection with it, for ethnology and anthropology also. Moreover anthropology has been materially promoted by the advanced medical science of Austria; Austrian biological and psychological researches in their social bearings owe their development in part to this source.

The University of Vienna must be regarded as the center for all these social disciplines in Austria. Founded in 1365, it is the second oldest university in Central Europe. The centralistic politics of the imperial court and of the former Viennese government redounded particularly to its benefit; in this way the social sciences could develop favorably there too. Amply provided with appropriate chairs of learning, with seminars and special research institutes, the University of Vienna has always had a strong attraction for foreign as well as native students. Contemporary Austria is trying by every means to maintain the high level of the University of Vienna, for it is conscious of the fact that Vienna's former political power can be replaced in the cultural sphere only in this way. As centers of instruction in the social sciences, the universities founded at Graz in 1585 and at Innsbruck in 1673 must also be taken into account. Of significance for German speaking Austria from this point of view must be reckoned the University of Prague, founded in 1348, the oldest university in central Europe, and the University of Czernowitz, founded in 1875. After the World War these two universities were ceded to Czechoslovakia and Rumania respectively. An attempt was made at

that time to introduce, in addition to the traditionally united law and political science faculty, special political science instruction after the German model, but the effort met with little success.

There are, in addition to the university in Vienna, a number of important advanced schools of equivalent rank, in which not only economic subjects are taught but individual legal and political disciplines as well. Worthy of note from this point of view are the Export-Akademie, founded in 1898, transformed in 1919 into a Hochschule für Welthandel; the Hochschule für Bodenkultur (1872); the Konsularakademie (1754), an advanced public school since 1919; also the Wiener Technische Hochschule. Popular university courses and lectures, given outside the universities and advanced schools, are highly developed in Austria. With the vigorous cooperation of university professors and advanced school teachers they render useful service in the spread of knowledge in the social sciences. The Wiener Internationale Hochschulkurse, annually organized every fall since 1922, has served the same purpose internationally. Generally speaking, Austria endeavors rather to bring foreign students into the country than to send her own students into foreign countries. Consequently Austrian students of the social sciences are for the most part dependent on fellowships and subventions of foreign foundations.

In addition to the ranking and comparatively well-equipped seminars and research institutes of the University of Vienna in economics, sociology, jurisprudence, history, statistics and other social sciences, there are, besides, of some importance: the Oesterreichisches Archäologisches Institut (1898), the Oesterreichisches Institut für Konjunkturforschung (1927), the Forschungsinstitut für Gemeinwirtschaft affiliated with the Gesellschafts- und Wirtschaftsmuseum, the Forschungsinstitut für Osten und Orient (1916), the Wissenschaftliches Institut für Kultur und Geschichte des Sudetendeutschums (1920), the Institut für Genealogie, Familienrecht und Wappenkunde (1922) and the Forschungsinstitut für Rassen- und Konstitutionsanthropologie, affiliated with the Naturhistorisches Staatsmuseum (1923).

Of the Vienna museums the following are important from the standpoint of economic science: the Oesterreichisches Museum für Kunst und Industrie (1863), the Technisches Museum für Industrie und Gewerbe (1918) and the

Technologisches Gewerbemuseum (an institution for instruction and experiment); for historical research the Historisches Museum der Stadt Wien (1888), the Kunsthistorisches Museum (1891) and the Oesterreichisches Heermuseum (1885) are to be noted; for ethnology and anthropology the corresponding divisions of the Naturhistorisches Museum and the Museum für Volkskunde (1896).

Like the museums the Vienna libraries derived benefit from the centralistic endeavors of the earlier governments and from the wealth of the imperial dynasty. The Hofbibliothek (called Nationalbibliothek since 1920), founded in the second half of the sixteenth century, is one of the most important in Europe so far as the social sciences are concerned. In addition to the university and advanced school libraries, and the libraries of the federal chancellery and of various ministries, special reference must be made to the Wiener Stadtbibliothek (1856), the Bibliothek des Bundesamtes für Statistik and the Bibliothek des Nationalrates (1870). Of the Vienna archives these are especially valuable: the Haus-, Hof- und Staatsarchiv (1749), the Hofkammerarchiv (1516), the Archiv der Stadt Wien, the Kriegsarchiv and the Deutschordens-Zentralarchiv (1904).

Since the University of Vienna, with extremely extensive interests, covers a very material portion of the work in Austrian social science, and since the German social science societies and associations extend their keen activity to Austria as well, the sphere of the corresponding Austrian associations is comparatively limited. The most distinguished among them is the Wiener Akademie der Wissenschaften (1847), which materially advances the social sciences through the numerous special commissions of its second division. For economics only, the Oesterreichische Gesellschaft für Sozialpolitik (1924) is to be taken into account. The erstwhile very active society of Oesterreichische Volkswirte was already discontinued during the World War. For historical science these societies are important: Verein für Geschichte der Stadt Wien (1853), with its yearbooks; the Gesellschaft für die Geschichte des Protestantismus in Oesterreich (1879), likewise with its yearbooks; the Heraldische Gesellschaft "Adler" (1870), with its monthly journal, and the Wiener Prähistorische Gesellschaft (1914), with the *Wiener prähistorische Zeitschrift*. Dedicated to jurisprudence are the Wiener Juristische Gesellschaft (1867), the

Oesterreichische Kriminalistische Vereinigung (1906) and partly also the Internationaler Anwalt-Verband (1899), with its periodical *Gerechtshalle*. For anthropology and ethnology reference must be made to the Anthropologische Gesellschaft (1870), with its *Mitteilungen*, and to the Verein für Volkskunde (1894), with the *Zeitschrift für Oesterreichische Volkskunde*, and to the Oesterreichischer Heimatschutzverband (1913), to which belong all Austrian associations for the preservation of national customs and folklore. The Geographische Gesellschaft, which publishes *Mitteilungen*, was founded as far back as the year 1856. Finally in the fields of philology and psychology the following are to be noted: the Wiener Neuphilologischer Verein (1894); the Internationaler Verein für Individualpsychologie (1911), with the *Internationale Zeitschrift für Individualpsychologie*; the Wiener Psychoanalytische Vereinigung (1922), with the *Internationale Zeitschrift für Psychoanalyse*, and the Internationale Religionspsychologische Gesellschaft, with the *Archiv für Religionspsychologische Forschung*. Devoted only partially to the pursuit of the social sciences in general are the Oesterreichische Leogesellschaft (1892), with its yearbooks, and the Wissenschaftlicher Klub in Wien (1876), with its monthly journal.

Despite the multiplicity of separate Austrian social science societies and periodicals, the center of gravity of Austrian achievement in this field lies in the work which is performed jointly with German social science research. Austrian social scientists are constantly working for German periodicals and occasionally even editing them. The same interchange takes place in connection with joint compilations and textbooks. Exchange students and professors have always been most numerous between Austrian and German universities. As a result of this extremely active interrelation, which we must again emphasize in conclusion, it is often quite difficult to draw a dividing line between Austrian and German social science research. It should be added that there is in Austria no desire to stress such a boundary. For the movement toward union with Germany strongly asserts itself in the field of the social sciences.

II. HUNGARY. The Hungarians are a nation of jurists. One of the most prominent traits in their character is the lively interest, among the most widely separated strata of society, in problems of public law. The high development of this interest is due to the peculiar history of their

country. Surrounded by peoples ethnically foreign, the Hungarian state could maintain itself during the thousand years of its existence only by constant political struggles. This is the first reason why problems of public law have always been in the foreground. A second reason may be found in the eternally problematic political relationship to the other half of the former Austro-Hungarian monarchy. Finally, since the breakup of the monarchy, the aspiration toward a revision of the Treaty of Versailles has been strongly influenced by a public law viewpoint.

This general preoccupation brought with it, as the earliest development in the field of the social sciences in Hungary, the juristic and political disciplines, which still maintain their lead today. Juridical subjects were expounded in the oldest Hungarian universities—in the university at Pécs, founded in 1367, and in the universities at Óbuda and Pozsony which date, respectively, from the end of the fourteenth and the middle of the fifteenth centuries. But while these early universities did not survive, a leading role should still be assigned to the juristic faculty established in 1667 at the University of Nagyszombat, which later moved to Budapest. At first this faculty consisted of only four chairs of instruction, dedicated respectively to Roman law, canon law, Hungarian positive and formal law. A differentiation in these branches of instruction, and the addition of other juristic and political subjects, followed in the course of later centuries. In addition to these faculties at the University of Budapest complete faculties of law and political science exist now in the universities at Szeged and Debreczen and in the new university at Pécs. Significant as showing the extent of Hungarian juristic and political instruction is the fact that there were in addition twelve law and political science schools called law academies, whose curricula corresponded with those of the universities. Only three of these independent schools still exist—in Miskolc, Eger and Kecskemét.

The law of custom plays an extremely important part in Hungary even today. Moreover the Hungarian constitution is decidedly historical in character. Hence the historical viewpoint has long been prominent in Hungarian juristic research and in the always closely associated research in political science. It was only during the second half of the last century, when codification of laws was making great strides, that a new energy manifested itself in

the institution of positively directed research. In addition, attempts to codify Hungarian civil law, which had been going on for decades, served to bring out strongly the legalistic, political viewpoint. After the important pre-war literary creations, embracing whole fields of knowledge, especially private law, commercial and criminal law, procedure and state and administrative law, this last decade, juristically and politically so restive, has yielded mainly monographic treatments.

History as a discipline developed mainly within the faculty of philosophy of the University of Nagyszombat during the eighteenth century. Instruction in history was introduced also into other philosophic faculties and was later partially included in the law faculties as well. In general, public law and also statistical and geographical influences played an important part in historical research in Hungary as far back as the beginning of the eighteenth century. Protestant scholars were leaders in this research; while Catholic investigators—especially Jesuits—applied themselves mainly to studies in church history. In the second half of the eighteenth century the two currents were combined in active, critically conducted, historical research. Later, however, during the romantic period the scholarship preoccupied with original sources suffered a certain decline. Only since the second half of the last century has it flourished again by dint of modern methods and a far reaching, systematic division of labor. In the last generation the juristic, economic and socio-historic viewpoints have again been emphasized. Since the dismemberment of the country, Hungarian historical research still looks upon the lost territories as within the field of its labors.

Economics has been included in the curriculum of the law faculties since the beginning of the last century. Recently, in 1914, instruction in economics was materially extended by the establishment of an economics faculty at the Budapest Higher Technical School. In addition, several older, independent schools, with economic interests and university rank, have been combined to make possible a special University Faculty for Economics in Budapest, with twenty-two chairs of instruction and well-equipped seminars. Everywhere in Hungary instruction in finance is closely connected with the course in economics. After an initial inclination to classical economic theory of individualistic-liberal stamp, Hungarian research in eco-

nomics produced its first internationally distinguished fruits in the second half of the last century, under the influence of the German historical school. A socio-ethical current made itself felt particularly strongly about this time. The psychological and mathematical viewpoints of modern abstract theory found much favor during the last decades of the century. But gradually the significant public law viewpoint, so characteristic of the Hungarian way of thought, also penetrated into economic research; and just recently the juristic presuppositions of economic institutions have been emphasized by Hungarian writers with ever growing success. In addition, the general political interest of the Hungarian has brought forth several noteworthy scientific achievements in the field of social politics and economic policy.

The teaching of statistics in Hungary is confined to the law faculties. The development of this science was for a long time held back by unfavorable political conditions, but, since the second half of the last century—that is, since the founding of the National Statistical Bureau (1871) and of the Statistical Bureau of the City of Budapest, both decidedly of first rank—it has made a sharp ascent. It changed rapidly at that time from a mere description of the notable events in the life of the state to modern, methodical observation of the conformities that emerge in the social growth. Scientific achievements in Hungarian statistics are characterized by profound methodological observation and by a lively socio-ethical sense. Hungarian research may claim great significance in the field of enterprise and business statistics, in the perfection of export statistics on the basis of international cooperation, and in individual branches of public health statistics.

The prominence given to public law in Hungarian thought and the central position of juristic and political science, as the two decisive emphases in the development of all the social disciplines, manifest themselves most clearly in Hungarian sociological research. As a result of this lively interest in public law Hungarian sociology, just as it was attaining a higher development at the turn of the century, was drawn into the proscribed area of political struggle. This fact explains why it has been impossible, even to this day, to establish separate chairs of sociology in the Hungarian universities. Sociological lectures are held only here and there. As to content, the predominant role of juristic and political science appears

especially in this: that sociological research in Hungary received its most valuable stimulus from juristic philosophy; it received, besides, most inspiring contributions from general political science. On the soil of these two influences it has developed a fruitful, idealistic attitude in speculation, which partially inclines toward the Kantian theory of norms. The second main current of Hungarian sociological research bears the impress of Comtian positivism, of Darwinian materialistic evolutionism and of the Spencerian organic theory. Adherents of this phase of sociological theory became extremely active during the decades before the World War.

In the second half of last century the Finno-Ugric extraction of the Hungarian people was established, as against the Turko-Tartar hypothesis, in the course of a long controversy which brought about the rise of comparative philology in Hungary. Ethnology and anthropology both gained strength from the controversy. As to the socially important philosophical sciences, it is to be noted that a chair of aesthetics had already been established in 1774 at the University of Nagyszombat. Hungarian pedagogical research is also of comparatively early origin; indeed Comenius worked in Hungary for several years about the middle of the seventeenth century. Recently the socio-pedagogical and in a measure also the psycho-technical trend of modern pedagogy has excited special interest. Ethical research, in its socio-ethical relations, has always rendered most useful service to the Hungarian social sciences. The disciplines mentioned in this paragraph are taught in the faculties of philosophy in the universities.

The Hungarian Scientific Academy deserves a most conspicuous place in the history of the development of the social sciences in Hungary. Founded in 1825, it has since assembled, especially in its second division, the most distinguished Hungarian representatives of the social sciences. Its activity concerns especially the organization of lectures and discussions, the publication of historical and other source material, of scientific compilations and individual monographs, and the publication and subvention of scientific periodicals. Most of the social disciplines in Hungary owe their present degree of development mainly to the stimulation received from the academy. By reason of large gifts the academy has recently come into a position where it will be able to extend its activity even more widely in the future.

In addition to chairs for the separate social disciplines, all Hungarian universities have arranged seminars after the German pattern in which the students approach a practical understanding of what they have learned under the leadership of the professors and their assistants. Social science research institutes outside the universities are only in process of formation. A Sociographic Institute was established in Budapest in 1924 for the observation of general social phenomena. The Socio-Political Institute in Ujpest (1910) seeks to investigate living conditions among factory workers, while the Hungarian Institute for Economic Research in Budapest is dedicated mainly to the observation of the business cycle. Since approximately the beginning of the century popular university courses, in which the social sciences occupy front ranks, have been held in Budapest and several other Hungarian cities. In general, however, these courses drew a comparatively poor attendance. After the war an unsuccessful attempt was made to introduce into intermediate school instruction the principles of economics and of sociology in addition to history. Great significance attaches to the Hungarian Historical Institutes, founded in Rome and Vienna in 1888 and 1919 respectively, and active in gathering from the Vatican and the Vienna archives material that is valuable from a Hungarian standpoint. After the war Hungarian colleges were established in Berlin, in Vienna and in Rome. They offer numerous young Hungarian scholars the opportunity to penetrate into the spirit of foreign social science. Lately numerous fellowships for the same purpose have been granted annually, in part by the Hungarian government and in part by foreign scientific societies and foundations.

Besides the various divisions of the National Museum in Budapest, the following Hungarian museums are of especial significance for the individual social disciplines: the Social Museum, the Museum of Commerce, the Agricultural Museum, the Museum of Industrial Technology, the Museum of Military History, the Museum of Industrial Arts, the Hopp Ferencz East Asiatic Museum and the Museum of Public Health, all in Budapest; also the Museum of Christian Art in Esztergom. The most important Hungarian library for the social sciences is the Municipal Library in Budapest; others, likewise important, are the Budapest libraries of the National Museum, the Scientific Academy,

the Parliament and the National Statistical Bureau, also the various advanced school libraries and, above all, the library of the University of Budapest. Among the archives these are especially to be noted: the great National Archives in Budapest, the archives of the Budapest National Museum, and those of the Prince Bishop of Esztergom. Valuable libraries and archives were lost in the dismemberment of the country. Since 1922 most of the public scientific collections of Hungary have been combined in a great country wide union, so as to secure the advantages of unified management.

Numerous Hungarian scientific societies are developing a very lively activity in the field of the social disciplines. Some of these societies strive toward a popularization of the social sciences. For jurisprudence front rank is held by the Hungarian Association of Jurists, founded in 1879, with its periodical, *Magyar Jogászegyleti Ertekezések* (Transactions of the Hungarian Association of Jurists). In the domain of historical science the Hungarian Historical Association (1867) is especially worthy of consideration, with its periodical, *Századok* (Centuries); also the Hungarian Archaeological Society (1878), with the periodical, *Archaeologiai Ertesítő* (Archaeological Reports); the Minerva Society (1921), with yearbooks and the periodical, *Minerva*; also the Hungarian Heraldic and Genealogical Association (1883), with the periodical, *Turul*. For political economy the Hungarian Society for Political Economy (1894) is to be noted, with its periodical, *Közgazdasági Szemle* (Review of Political Economy); for statistics the Hungarian Statistical Society (1922), with the French periodical, *Journal de la Société Hongroise de Statistique*; for sociology the Hungarian Social Science Society (1925), with its periodical, *Társadalomtudomány* (Social Science). The following periodicals are sociologically important: *Budapesti Szemle* (Budapest Review); *Városi Szemle* (Municipal Review); *Statisztikai Szemle* (Statistical Review); *Századunk* (Our Century); also the *Magyar Filozófiai Szemle* (Hungarian Philosophical Review), edited by the Hungarian Philosophical Society (1900). For pedagogy, aesthetics, linguistics, ethnology, anthropology and geography the following deserve prominence: the Hungarian Pedagogical Society (1876), with the periodical, *Magyar Paedagógia* (Hungarian Pedagogy); the Hungarian Society for Child Study and Practical Psychology (1903), with the periodical, *A Gyermek* (The Child); the Association for

Higher School Teaching (1907), with the periodical, *A Felsőoktatásügyi Egyesület Közleményei* (Reports of the Association for Higher School Teaching); the National Hungarian Association for Plastic Art (1861) and the National Hungarian Association for Industrial Art (1885), with the periodical, *Magyar Iparművészet* (Hungarian Industrial Art); the Budapest Philological Society (1874), with the periodical, *Egyetemes Philológiai Közlöny* (General Philological Reports); the Hungarian Linguistic Society (1904), with its periodical, *Magyar Nyelv* (Hungarian Language); the Hungarian Ethnographic Society (1889), with its periodical, *Népélet* (Folk Life); the Turanic Society (1910) with its periodical, *Turán*; the Körösi Csoma Society (1920), with its periodical, *Keleti Szemle* (Eastern Review); and the Hungarian Geographic Society (1872), with the periodical, *Földrajzi Közlemények* (Geographic Reports). Societies which reach out into several fields of knowledge but which are also of special importance for the social sciences are the Saint Stephan Academy (1915), the Protestant Literary Society (1888), the Hungarian Society for Foreign Politics (1920), the Hungarian Scientific Society Urania (1899), the Budavár Scientific Society (1920); also the associations of the Friends of Szeged

(1922), of Debrecen (1922), and of Pécs Universities (1921). After the war the scientific societies of Hungary, like the public scientific collections, were combined in a great country-wide union.

In general these societies and their periodicals provide the connection between professional activity, under the leadership of university professors for the most part, and wider groups of the educated public. In addition to the periodicals mentioned other social science literature is enjoying a most gratifying growth. Even in the subdivisions of most of the sciences the students have had good Hungarian textbooks at their disposal for two or three generations. However, in view of the linguistic isolation of the country, some Hungarian writers consider it necessary to publish the results of their social science research, either entirely or at least in summary, in one of the world languages. German is generally preferred, inasmuch as the spiritual ties, even in respect to the social sciences, are strongest with Germany and Austria; indeed the most important literary influence has always come from these countries. Occasionally, however, French and English are used, even Italian in individual instances.

THEO SURÁNYI-UNGER

V

Italy

I. ITALY TO THE END OF THE WORLD WAR. The progress of the social sciences in Italy is bound up with university instruction. This is in accordance with the observations of John Stuart Mill regarding the development of a learned class. "The most effectual plan and at the same time the least liable to abuses," he wrote, "seems to be that of conferring Professorships, with duties of instruction attached to them. The occupation of teaching a branch of knowledge, at least in its higher departments, is a help rather than impediment to the systematic cultivation for original researches, and the greatest advances which have been made in the various sciences, both normal and physical, have originated with those who were public teachers of them; from Plato and Aristotle to the great names of the Scotch, French and German Universities."

The academic teaching of the social sciences in Italy dates from 1754, when Bartolomeo Intieri, a Tuscan abbot, founded a chair of political economy at the University of Naples. In the agreement with the university Intieri stipulated that instruction be given in Italian, a radical innovation at that time; that Antonio Genovesi occupy the chair for life; that Genovesi's successors be selected by competition; and that no occupant of the chair be chosen from the ranks of the regular clerics. It was also stipulated that instruction in mechanics and commerce was to cover a two year period.

At the time of his appointment to the new chair of political economy, Genovesi was forty years old. He had already been professor of philosophy, metaphysics and ethics, and only his somewhat unorthodox Biblical criticisms had prevented his being appointed professor of theology. Genovesi's enthusiasm for his new duties was shared by his students. Until his death (1769) he lectured to crowded audiences, which frequently included illustrious foreign scholars; and the impetus to the study of the social sciences in eighteenth century Italy was in large measure due to his eloquence and erudition. He discussed the works of John

Cary, Locke, Melon, Dutot, Forbonnais, Utariz, Ulloa, Montesquieu and Hume. In 1765 he published his lectures on commerce and civil economics; they went through several editions in Italy, were translated into German in 1776, into Spanish in 1785, and remained in use as a textbook in Italy for many years. Although Genovesi was neither free from mercantilistic prejudices nor absolutely opposed to the regulation of internal commerce, he attacked privilege and monopoly, which led an adversary to declare that he was the first to arouse the democratic spirit. The most prominent representatives of Neapolitan erudition in the last decade of the eighteenth century were his disciples, and it was his teaching that inspired the works of Filangieri, Palmieri, Briganti, Pagano, Galanti, Delfico, Torcia and many others, all zealous promoters of the cause of scientific progress and of social betterment.

Cesare Beccaria's teaching, which began January 9, 1769, in the Palatine Schools of Milan, was less influential. Beccaria, famous as the author of *Dei delitti e delle pene*, taught what was known as cameral science, although it dealt with political economy, as may be observed from the lectures which circulated in manuscript and were published by Custodi in 1804, ten years after the author's death, in the collection of Italian economists. He relinquished his post after two years, for he was appointed to the Supremo Consiglio di Economia in 1771. Both Beccaria and Verri were instrumental in doing away with the guilds and also in instituting other reforms in the economic and financial administration of Lombardy, especially in provisioning, currency, weights and measures. Beccaria's lectures are models of precision and rigorous deduction, although he is of course not entirely free from mercantilistic misconceptions and concedes the value of protective tariffs.

In 1772 a chair of civil economics was founded at the University of Modena and the professorship was conferred upon Agostino Paradisi, distinguished both as poet and as prosodist. Although they lasted only eight years, Paradisi's

courses served to arouse thought and discussion in the field of financial and economic reform. He advocated the abolition of tax privileges, simplification of the tax system and more precise regulation of charitable institutions. When Paradisi retired, the chair was suppressed and was not reestablished until 1859 when Modena was politically reunited with Italy.

The following economists should also be mentioned in a review of the teaching of economics in Italy: Vincenzo Emanuele Sergio, professor of economics, agriculture and commerce (the chair was founded in 1779 in the R. *Accademia degli Studi* in Palermo and was retained until 1806), and Paolo Balsamo, who succeeded him in the academy, which had been transformed into a university some years earlier. By his effective teaching he spread Smith's doctrine in Sicily; he attacked barriers of all kinds, maximum prices, government contracts—in general all prohibitions which restricted agriculture and industry in Sicily—and even went so far as openly to declare himself in favor of international free trade.

As in the Universities of Pavia and Padua, the executive directorate of the Cisalpine Republic created a chair of political economy at the University of Bologna. It likewise founded chairs of public and international law, history of customs and laws, as integral parts of the faculties of jurisprudence. From 1801 to his death in 1828 Luigi Valeriani occupied the chair at Bologna. Although the chair of political economy had been suppressed in the reorganization of the University of Bologna undertaken by the papal government in 1824, by an exceptional ruling it was continued during the lifetime of Valeriani in consideration of his signal merit. Valeriani's teaching was indeed fruitful for the progress and the spread of the social sciences: his works are original, erudite and keen, especially in his treatment of the theory of value and of the relations between economic and juristic phenomena. Among his pupils was Pellegrino Rossi.

From this period of rather occasional teaching of social economics, we pass with the unification of Italy to a systematic period. In 1846 Piedmont effected the administrative reforms which cleared the way for the constitutional liberty and the purposive action of the political Risorgimento. In the faculty of jurisprudence a chair of political economy was instituted which was held by the young Neapolitan Antonio Scialoja. He had, a few years earlier, at the age of twenty-two (1840), published the

Principi della economia sociale which aroused the admiration of his colleagues because of its sound doctrine and its scholarly research. His lectures were attended not only by students but by such eminent Piedmontese as Camillo Cavour, Massimo d'Azeglio, Cesare Balbo—"by all that brilliant constellation of great minds and famous men that rose on the political horizon of Italy and anticipated the new era. And he conquered the souls of his hearers by his marvelous eloquence, and confounded them by the loftiness of his ideas" (Carlo de Cesare, *La vita, i tempi e le opere di Antonio Scialoja*, Rome 1879, p. 34). Scialoja continued to teach until the first months of 1848, when his desire to cooperate in the political regeneration of his native land caused him to return to Naples. There public opinion soon forced him into the councils of the king, who at that time seemed sincerely disposed to pursue the paths of liberty. After the reaction he was jailed with several other ministers. At Turin another *émigré*, the Sicilian, Francesco Ferrara, who had just emerged from that very Bourbon prison in which his predecessor was about to be shut up, succeeded to Scialoja's professorship. Ferrara taught at the University of Turin until 1859 and his courses were widely attended by very select audiences. According to Cavour, who speaks of them in various articles on the Risorgimento, they mark a "new era in the study of economic science in Piedmont." At that time he began the publication of the *Biblioteca degli economisti* and of those masterly prefaces in which he used the occasion afforded by these translated works not only to discuss their content but to proceed to his own analysis of scientific problems. He exercised great influence upon all Italian students by his profound wisdom, his spirited enthusiasm, his irresistible argument and his fascinating style; and it may be said that for several decades he occupied a prominent place in Italian economic literature.

After Italian unification, beginning especially with the third decade before the close of the nineteenth century, the study of the social sciences in Italy became completely, or almost completely, identified with the universities. This was in part due to the ordinances governing higher education. The original law of 1859 provided that all professorships were to be awarded competitively and that the competition was to be judged on the basis of scientific reputation. The contestants must prove

that they had mastered their subjects, and must give evidence of research ability. The functions of the *Privatdocent* were similar to those of the official professor. The position was and is conferred following tests of the candidate's ability to understand scientific truths and to disseminate the spirit of research. The greatest freedom of instruction is guaranteed; no programs are arranged other than those proposed by the professors themselves and approved by the faculty with a view to coordinating the various disciplines. These programs can be changed annually and there is no set mode for the presentation of a given subject.

Beginning with 1860 instruction was instituted in political economy, and in 1875 in statistics, in the faculty of jurisprudence, which comprised in addition the chairs of private law and of the philosophy of law and various chairs of public law. The ordinance of 1885 introduced into all Italian universities special chairs in the science of administration and finance, which had previously existed in only a few of the universities. Separate faculties of political and social science have been established only recently, in some universities only after the Gentile Law of 1923 gave them wider autonomy in determining their courses and in selecting their faculties. However, almost all the faculties of jurisprudence instituted schools and courses comprising subjects of a social and political nature which previously had not been specifically represented, such as economic history, history of economic doctrine, history of treaties, constitutional history, commercial policy, etc. They were empowered to confer the doctorate in social and political science, or in political and economic science, as well as in jurisprudence. These added courses, however, are almost always based upon various courses constituting the faculty of jurisprudence proper, which they complement. According to individual university regulations the doctor's degree in social science can generally be obtained by doctors of jurisprudence with two years or even a single year of attendance in special courses. Ever since the unification of Italy the institution of special faculties of political or of social and political science had been discussed, but the idea prevailed of maintaining the unity of the jurisprudence faculty, which was, indeed, becoming more and more a juristic-social rather than a purely juristic faculty. Professors of economics were able successfully to impart a scientific character to their courses, which were

widely attended, since students of jurisprudence considered courses in economics fundamental even for a strictly juristic training and the doctor's degree in jurisprudence was requisite for admission to many careers and public offices as well as to the practise of law.

In Florence the Istituto di Scienze Sociali, "Cesare Alfieri," founded in 1874, was more concerned with preparation for the diplomatic and the consular service than with purely scientific learning. The higher schools of commerce, with numerous professorships in economics, had a more or less professional cast, at least until recent years. The one at Venice, R. Istituto Superiore di Scienze Economiche e Commerciali, is an exception; since the beginning it has had a section for teachers and for the preparation of docents in economics in the secondary schools.

The revival of the study of the social sciences in Italy was, as we have said, promoted almost entirely by the universities. Luigi Cossa was a famous professor whose pupils either directly or indirectly included all the university professors of the last thirty years of the nineteenth century; among them should be mentioned Giuseppe Ricca-Salerno, Maffeo Pantaleoni and Achille Loria. Cossa had the spiritual and intellectual qualities that inspire scientific research, and he understood the aptitudes of his pupils, assigning to each the work to which he was most suited. Angelo Messedaglia, an eminent scholar who dealt with various economic, demographic and financial problems with gratifying results, was contemporary with Cossa. Scientific research, characterized by critical objectivity, advanced under these leaders and was extended to all fields of economics—doctrine, history and policy, demography, and methodology and application of statistics. It was a result of the impartiality which characterized these investigations that Italy never gave rise to any independent school of economics. Each investigator used the method most suited to the nature of his research and his inclinations. Chairs of sociology were established only in a few universities, relevant courses were given only occasionally, in certain years; but sociological research was pursued nevertheless by professors of philosophy, of demography and of political economy. Although political economists did not adhere to the materialistic interpretation of history, they constantly referred to the importance of the economic factor in the constitution of society and also devoted special

courses of lectures to the sociological doctrines.

The introduction of the study of political economy in the technical institutes likewise served not only to disseminate economic culture generally but especially to encourage scientific research, for several distinguished university professors began their academic careers in these institutes. In the universities there were institutes or seminars, with special libraries, attended by young men exceptionally qualified for scientific work. The first, which was called *Laboratorio di Economia Politica*, was instituted by Professor Cognetti de Martiis of the University of Turin in November 1893, and many of the pupils of that laboratory are today university professors with distinguished reputations in the fields of economics and social research. Since 1879 Siena has had a juristic institute with a special library and sections for economics and finance. Today all universities have these seminars for scientific training and advanced research. Many of them publish annals or reviews in which the memoranda and the papers of professors and students are collected. Moreover the reviews that are not the direct product of university faculties or schools publish papers that are influenced or inspired by the universities, the higher institutes or works of university professors. The academies encourage the publication of scientific studies by awarding prizes on topics that may or may not be specifically assigned. These writings in the social field, however, with occasional rare exceptions, are the work of university professors or their students.

AUGUSTO GRAZIANI

II. ITALY UNDER FASCISM. The two great figures which dominated the social sciences in Italy immediately before the advent of Fascism were Vilfredo Pareto and Benedetto Croce. Both of these scholars involuntarily contributed to the setting of the stage for Fascism. Pareto, the economist, led the attack on democratic institutions and conceptions of government and made a strong plea for genuinely scientific statecraft carried on by economic experts. Croce, the historian and philosopher, contributed largely to a self-conscious national tradition in thought and culture and erected a philosophic framework for the social sciences which was peculiarly a product of Italian experience. Although Pareto and Croce had little in common, the net outcome of their systems was to link politics and economics

closely together and to separate them from the moral ideas which the Catholic church on the one hand, and the French Revolution on the other, had associated with political life. Fascism continued to emphasize the economic factor in social science, but it refused to divorce morals, art and religion from politics. The Fascist doctrine that society is to be understood in terms of the clash of peoples or nations, and that each people must be a spiritual and economic unity which must be expressed by the sovereign and omniscient state, found its chief expression in three schools of thought: the idealistic school of Giovanni Gentile which glorified the state, at the expense of the church, as the embodiment of Italy's moral and spiritual life; the nationalist group of politicians, led by Enrico Corradini, who revived Italy's imperialistic ambitions and made a cult of Italian expansion; and Mussolini and his associates, who used their syndicalistic doctrines of violence and creative will first against the socialists and then against the democratic liberals. The implications of such doctrine for social science are that the various social disciplines must all be subordinated to politics; that politics itself is an art rather than a science; that it must be conducted by a small group of political experts or geniuses; and that these political experts must use and develop the social sciences as technical instruments for their art. In short, social science is conceived by the Fascists as primarily a technical discipline for statecraft, not a general subject matter for public education.

In practise this means that the elementary schools lay stress on patriotism, art and religion; that superior schools emphasize technical and vocational training in social science; and that universities are centers of research. All children are taught a practical familiarity with their national traditions and social institutions from the very start. They are taught a romantic kind of history and the conventional forms of religion, but the emphasis is always on the appreciative or practical aspect; they are taught to love their country, admire its heroes, sing its songs, practise its rites, etc. In the superior schools a restricted, selected fraction of the people is taught the technical detail of the operation of social institutions for professional use. History is treated more scientifically than in the elementary schools, and the teaching of philosophy and sociology is substituted for religious instruction. In the universities a still

smaller group is given freedom for research, for guiding the solution of social problems and in general for the development of a critical competence in social science. Of course much of this educational program is not characteristically Fascist. The chief innovations introduced by the Fascists were the teaching of religion in the elementary schools and the development of technical, vocational education in the social sciences in the superior schools. These are, however, merely applications of the fundamental principle that religion, morals, art and science are all but aspects of social organization, and as such they are to be subordinated to and supervised by the state, the organ and expression of the social unity of the nation.

The technical organization of social science teaching has undergone less change than the content of the instruction. The Fascist government was forced to proceed slowly in the reorganization of the universities, partly out of fear of arousing active opposition among intellectuals who were already cool toward Fascism, partly because of the pressure brought to bear by ambitious politicians who sought professorships as sinecures and as spoils of political victory. Nevertheless, immediately after the march on Rome, would-be professors began to expound various aspects of Fascist doctrine at the universities as *liberi docenti*. Courses were offered in the recent history of Italy (usually a camouflaged title for Fascist propaganda), in the principles of national syndicalism, in corporate law, in the theory of the state, etc. A second type of Fascist influence in the universities came from those regular professors who had joined the Fascist party and who naturally became Fascist leaders in university circles. Among these should be mentioned Alberto de Stefani, Giovanni Gentile, Alfredo Rocco, Sergio Panunzio, Gino Arias and Gioacchino Volpe. These scholars, and many others, have applied their knowledge of the social sciences to the cause of Fascism.

A special effort has been made to concentrate the teaching of the social sciences according to Fascist principles in a few universities. Most notable was the founding of the Fascist Faculty of Political Science at Perugia in 1928, where it is planned to train Fascist leaders intensively. Lesser centers of Fascist teaching have been established at Rome, Pavia, Padua, Florence and Bologna. At Bologna there is a "Fascist University" which is really little more than a group of courses organized by Fascist students

and teachers for the spread of Fascist propaganda. The Istituto Nazionale Fascista di Cultura, which is more serious in nature, was established by Gentile at Rome. Its official organ is *Educazione fascista*, and it enjoys the cooperation of a number of reputable scholars.

At every university there is a Fascist student organization which serves as a social club, as a center of propaganda and political activity and also as a means of encouraging serious political studies. Edmondo Rossoni, the Fascist labor leader, has recently established a Labor University, but little can be said as yet of its activities or probable success.

Far more typical of Fascism, however, than these academic agencies of social science, are the research bureaus which are directly attached to the government. Most significant of these are the various federations of syndicates and the ministry of corporations, which is really a bureau for the cooperative solution of the nation's economic problems. Here the secretaries of the federations of syndicates and other experts are summoned, as need may arise, to investigate sources of conflict, waste or disorder among the various economic groups or interests of the nation. Closely allied to the ministry of corporations are the compulsory labor tribunals. These courts, in cooperation with the ministry of corporations (under the leadership of G. Bottai) and the ministry of justice (headed by Alfredo Rocco), are constructing a new body of law, dealing in a new way not only with labor problems but with almost every imaginable phase of economic activity. The codification and reconstruction of Italian law is in itself an enormous task assumed by Rocco and already well under way.

Several agencies dealing with specific problems have been created by the Fascist government, e.g. the Institute for Exportation, the Institute for Emigration and the Central Bureau of Statistics. No doubt the most vital and effective research now being done in Italy is being carried on by these non-academic agencies.

The Fascist theory is that social science is, or ought to be, in the service of the state. Hence the demand is constantly made by Fascist politicians that the universities be "purified" of all anti-Fascist elements and teaching. In a famous speech in the Chamber of Deputies on the Law of April 3, 1926, Mussolini said: "The professor fulfils a function in national life much more delicate than that performed by the official of a public service or by the

magistrate. The professor, who molds minds and consciences and can make of men either heroes or cowards, has an extremely important function in the life of the nation. Hence he must be an atom, not a group or association, in the state." In other words, associations of professors, like associations of public employees, have no legal status in the Fascist syndical law, and the principle enunciated is that the more vital a person is to the life of the nation the less liberty he has. At least one economist has been forced to resign and a number of others have been intimidated by violence or threats of violence; and in general no pretense is made of respecting academic freedom. In spite of this theory many social scientists who are not Fascists are still tolerated in the universities.

The press has been more quickly and thoroughly "Fascisticized." Editors are expected to avoid publishing political debates, discussions, council proceedings and in general anything reflecting the presence of various points of view, and to publish only the results of the deliberations, thus giving the appearance of unanimity, "discipline," and successful cooperation within the Fascist ranks. The public is supposed to know outcomes of issues, not to participate in their discussion or solution. But here again the theory is more stringent than the practise, and anyone who knows how to

read between the lines can get a fair amount of political discussion from Italian newspapers.

It goes without saying that all the agencies of political science which we have mentioned receive their financial support either through local governments or *fasci* or through the central government. In addition the government has lent its support increasingly to various agencies of social welfare which have no immediate political functions. The compulsory syndicate tax serves to support most of such institutions. Among them should be mentioned the *Dopo Lavoro* (a national agency for the education and recreation of laborers), the Association of War Cripples and Invalids, the Institute of Insurance, the Institute for the Protection of Maternity and the Institute against Tuberculosis. A special effort is being made to increase the production of grain by means of prizes, exhibits, lectures, etc. In general the government is most active in fostering agricultural science, drainage, irrigation, hydroelectric engineering, etc.

In short, practically all organizations of public import are being "protected and disciplined" by the Fascist government. Only the church has retained its independence, and even it has sacrificed some of its social organizations to the secular government and has stopped the political activities of others.

HERBERT W. SCHNEIDER

VI

Russia

I. IMPERIAL RUSSIA. The history of Russian universities begins with the foundation of the Imperial Academy of Sciences, established in 1724 partly according to the conception and plan of Leibnitz. This institution, located in St. Petersburg, was throughout the greater part of the eighteenth century something more than an ordinary academy; it was also the first Russian university. Like all the universities of that time it was a combination of secondary school and higher school of the university type. Until 1733 there was not a single Russian among the members of the academy, there were more teachers than students in its university classes, and it had to depend not only on foreign professors but also on foreign students. It was, moreover, very difficult to maintain regular and uninterrupted teaching. Nevertheless there were courses in the social sciences; among them were law (including Russian law), moral philosophy, history (including Russian history), and Roman and Greek antiquities, although as a rule they did not occupy the foremost place in the academy. In these fields the works and teaching of S. Th. Bayer (who entered the academy in 1725), G. Fr. Müller (1731), J. E. Fischer (1732), Strube de Pymont (1738), A. L. Schlözer (1765) and J. G. Stritter (1779) laid the foundation for the scientific study of Russian history, law and institutions. Even the work in natural sciences, the primary interest of the academy, was, in both research and teaching, of some importance in the development of the social sciences. The naturalists of the St. Petersburg academy were perhaps the first learned statisticians in Russia and the first to expound there the conception and practise of statistics.

Although university teaching in general and that of the social sciences in particular had its inception in St. Petersburg, the real development of the social sciences began in the University of Moscow. The first professors of that university, which had been from the outset divided into three faculties (law, medicine and philosophy), were drawn partly from the Russian graduates of the St. Petersburg academy

and partly from abroad. In the faculty of philosophy, general and Russian history were taught in addition to philosophic subjects. Among the purely social sciences in the faculty of law in its initial period, we find natural law, international law, Roman law, public law of the Holy Roman Empire, general and Russian jurisprudence, and politics. All of these subjects were taught by Philip Heinrich Dilthey, who had been specially invited from Vienna and who for a while embodied in his own person the entire faculty of law. Although at first he lectured apparently only in Latin and French, Dilthey soon learned Russian, familiarized himself with Russian law and became the founder of academic jurisprudence in Russia. Two future professors of law and several statesmen were graduated from the University of Moscow during its first eight years. The two professors, Desnitsky and Tretiakov, studied later at the St. Petersburg Academy of Sciences, and were then sent as university stipendiaries to Scotland, to the University of Glasgow. There they became the pupils of Adam Smith and the followers of David Hume. Tretiakov died early (in 1776), leaving only a small historico-economic treatise, in which he had expounded some of Adam Smith's ideas four years before the publication of the *Wealth of Nations*. Desnitsky was active for twenty years as teacher and scholar, succeeding Dilthey at Moscow University. He enriched Russian legal literature with a translation of Blackstone's *Commentaries*, excellent for its time but unfortunately incomplete, published in Moscow in 1780-82 by special command of Catherine II. Foreigners continued to appear in the law faculty of Moscow University, although in 1768 the Empress Catherine, at the very height of the nationalist and liberal period of her reign, proposed that lectures in the university, and especially those in connection with the faculty of law, should henceforth be delivered in Russian. From that year on, Russian became the principal language of instruction.

At that time university teaching was practically confined to general courses, based on

printed textbooks which had to be approved by the university authorities. Among the approved authors in the social sciences were Pufendorf, Nettelbladt, Heineccius, Vattel, Bielfeldt, Achenwall, Pütter, Montesquieu. A course of lectures by Professor Schneider, giving an exposition and interpretation of Montesquieu's *De l'esprit des lois*, was published in Moscow in 1782 in Russian and French. Toward the end of the eighteenth century Kant's influence left its mark on the philosopher Schaden, who lectured after 1776 on natural law and politics and was the teacher of the great Russian historian Karamzin. Apparently no instruction in political economy was given at the time at Moscow University, but economic policy was taught as a part of political science. Once during this period a course on private economics was announced. Statistics, as understood by Achenwall, was taught in connection with history almost from the founding of the university. In 1773 Professor Reichel published in Russian a short textbook on the statistics of the principal European countries. In jurisprudence the practical as well as the theoretical aspects were continuously stressed. The successor of Dilthey and Desnitsky was Goriushkin, a practical jurist, himself a judge and a high official, a specialist in positive law and the author of practical textbooks on Russian law and procedure.

Closely allied to the scientific and academic life of Russia, especially of Moscow, was the publishing activity carried on in connection with the university by the famous educator, the freemason N. I. Novikov. His friend and associate in editorial work was Johann Georg Schwartz, professor of philosophy and of the German language. Novikov's activities were at first limited and then suppressed during the reactionary period of Catherine's reign, but in spite of that a considerable cultural impetus was given to Russian public life, and a great bulk of educational matter, such as historical sources of great value, became accessible to the public, thanks to him and his associates.

With the beginning of the nineteenth century a revival of Russian academic life became apparent. New elements, both Russian and foreign, were injected into the University of Moscow. The Göttingen professor, Meiners, author of many books on the history of civilization, including a standard work on the universities of Germany, was the principal counsellor of M. N. Muraviev, who was then curator

of Moscow University and active in efforts to reform it. During this liberal epoch political economy was becoming especially popular in Russia. The works of Adam Smith, Herrenschwand, Verri, Alexander Hamilton and many other writers were translated into Russian. The influence of Jeremy Bentham was also felt at this time. Chairs of political economy were established in the Academy of Sciences, in the University of Moscow and in such other newly founded universities as those at Dorpat (1802), St. Petersburg (1803), Vilna (1803), Kazan (1804) and Kharkov (1804); the subject was taught in the faculty of moral and political sciences. Among its teachers were such distinguished men as Heinrich Storch, at the academy, Christian Schlözer, who lectured at Moscow University in German and French, and the Kantian, Jakob, at Kharkov. During the academic year 1806-07 the first course on finance was given in the University of Moscow. About the same time statistics, taught as a part of history in the faculty of letters at Moscow, was intrusted to a special professor of statistics, Grellmann. After him it was for a long time taught by Heym, originally a philologist, who later specialized in statistics and geography and also lectured, sometimes publicly, on the theory and practise of commerce. In 1821 Stepan Maslov, in standing for the degree of doctor of moral and political sciences, defended in the University of Moscow a printed Latin thesis on the scope and history of political economy.

The same period witnessed the definite establishment of the practise of sending young Russian scholars abroad for study, and henceforth they were dispatched in large groups. As early as the eighteenth century the Academy of Sciences and Moscow University were sending young Russian scholars to complete their studies in foreign universities. The University of Göttingen and, to a lesser degree, the universities of Leipsic and Strasbourg acquired in this way a special importance in Russian academic culture. In 1808 twelve scholars, provided with special instructions, were sent from the University (Pedagogical Institute) of St. Petersburg, some of them students of economics and law. Likewise in 1828 and 1834 the universities had to nominate candidates to be sent abroad to study, with the understanding that they were to be chosen on the basis of an examination in the Academy of Sciences. Upon their return to Russia the young law scholars were examined by a commission con-

sisting of professors and practical legal experts, according to a program drawn up by the great Russian statesman and jurist, Speransky. In this manner the future distinguished professors of public and administrative law (Redkin and Leshkov), of Roman law (Krylov), of criminal law (Barshev) and of political economy (Chivilev) were selected for the University of Moscow.

In 1835, by a new general statute concerning the universities, the separate faculty of law which had originally existed in the University of Moscow was restored. In it the following subjects were to be taught: philosophy and methodology of law, public law of Russia, Roman law and its history, history of Russian law, civil law, criminal law together with security police, welfare police (administrative law), financial law (finance), diplomacy and international law, and ecclesiastical law. After the closing of the universities of Vilna and Warsaw, courses on the system of law which was still in force in Poland were given in the University of Moscow, partly by former professors of the two universities named. Political economy and statistics, which was still understood in Achenwall's sense as a descriptive part of political science, were by this statute transferred to the faculty of history and philology. However, by the more liberal statute of 1863 they were restored to the faculty of law. With unimportant changes the subjects here enumerated cover all the disciplines taught in the faculties of law until the time of their suppression by the Soviet government. Under the statute of 1835 the teaching of the social sciences finally assumed its real university character, preserving at the same time a close contact with the needs of the outside world. Practical teaching of jurisprudence attained at that time a very high degree of perfection, since the number of students was small and the character of the teaching staff was showing constant improvement.

Although the fluctuations of government policy affected the character of university teaching, this influence must not be exaggerated. The excitement during the reactionary period of the reign of Alexander I, caused by the reprisals against the liberal professors of the universities of St. Petersburg and Kazan, lost its force in the following reign, when the whole matter was formally dropped. Of particularly great moment for the freedom of university life was the fact that under the auto-

cratic regime of the nineteenth century the Academy of Sciences, being exempt from outside censorship, preserved an absolute independence in matters of learning. The statute of 1804 directed that "every professor shall choose for his lectures one of his own works or that of another well known man of learning; in both cases the work so chosen shall be submitted for consideration to the University Council and if the Council thinks fit to introduce any changes into it, the professor, after having made same, shall submit them to the Council for approval." The statute of 1835, however, no longer contained this provision. Professors therefore achieved a greater independence, and the principle of freedom in teaching became so well established that it persisted as the leading principle of Russian university life. Whenever deviations from it took place they were due to political pressure, directed to the selection of professors (discriminating against those regarded by the government as politically undesirable) or to the selection of courses to be included in the curricula. Examples of the latter are the suppression, in the reign of Nicholas I, of the teaching of *jus naturae* and later of secular philosophy, and also the reactionary university reform of 1884.

Of the various social sciences, the greatest success, both in teaching and in training for research work, was achieved at this time in connection with Russian history, including legal history in the widest sense of the term, and also economic history. The founding of Russian history as a discipline may be ascribed to Gerhard Friedrich Müller and the Göttingen professor August Ludwig Schlözer, both of the St. Petersburg Academy. Considerable influence was also exercised by Johann Philipp Gustav Ewers of Dorpat University. Since the beginning of the nineteenth century this university, through its special institute for the training of Russian professors, had played a very important part in university education. Beginning with the thirties and forties Moscow University became the center of the systematic cultivation of Russian history, especially through the work of Mikhail Pogodin, a pupil of Heeren, and Sergei Soloviov, a disciple of Guizot, Ranke and Ritter. At the same time in St. Petersburg some particularly fruitful work in legal history was being done by Nevolin, author of the classical *History of Russian Civil Law* (in Russian, St. Petersburg 1851) and of a remarkable introductory textbook on law, translated at the

time into German. Russian history was at that time turning to a systematic study of historical sources, a great number of which were then being discovered and published. Legal and political history were greatly in advance of economic history. Church history, with its important social aspects, was intensively studied in the ecclesiastical academies, especially in Moscow, Kazan and Kiev.

The fundamental institutional changes of the sixties could not but affect the social sciences. The number of universities did not appreciably increase, but the number of students grew exceedingly and teaching became specialized. The dual role played by the universities became more conspicuous: they served as training grounds both for the professions, especially public service, and for scientific research work. Their standards of vocational instruction showed a decline. Thus the study of jurisprudence was, for the average student, practically reduced to a series of examinations whose nature depended almost entirely on the personality of the examiner. There were several reasons for this: the unsatisfactory character of the teaching in the schools preparing for the university; the overcrowding of universities; the absence of a clear conception of the fundamental difference between elementary university education and training for research work. At the same time universities were rapidly improving as training schools for future scholars. In spite of its general reactionary nature the university statute of 1884 proved helpful by introducing the German institution of *Privatdocent*, and the principles of free teaching and free choice of courses by the students. The scholastic work of each individual student was also intensified by the development, especially in the nineties, of the system of seminars and pro-seminars.

The greatest progress in training future scholars was made in the field of history, partly because of the large number of gifted teachers in the field. In the University of Moscow Vladimir Guerrier was the founder of seminar training for students of history in its broad sense. His work was continued and expanded by Paul Vinogradoff. Somewhat later Kliuchevsky and his pupils (among whom Miliukov, Liubavsky, Kiesewetter and Bogoslovsky occupied the first rank) exercised great influence. In Kiev historical schools were founded by I. V. Luchitsky, known by his investigations into the social history of France before and

during the revolution, and V. B. Antonovich who contributed to the study of the social history of southwestern Russia. In the University of St. Petersburg a school of Byzantology was founded by V. G. Vassilievsky who was chiefly interested in the social history of Byzantium. Another eminent Byzantinist was Fedor Uspenski of Odessa. Some fruitful work in general history, especially that of France and Poland, was done by N. I. Kareyev. A. S. Lappo-Danilevsky (of the Academy of Sciences) and S. F. Platonov, both lecturers in the University of St. Petersburg, did important work in Russian economic and social history. In the last decade before the 1917 revolution the activity of Rostovtzeff in the same university was of considerable importance for the study of the economic and social history of the ancient world.

In the general theory of law and public law a great influence was exercised in St. Petersburg by A. D. Gradovsky, N. M. Korkunov and L. I. Petrazycki; in Moscow at first by B. N. Chicherin, then by M. M. Kovalevsky (who, however, had to leave the university for political reasons), A. S. Alekseyev and P. I. Novgorodtsev. In the history of Russian law a great number of students were trained by M. F. Vladimirsky-Budanov in Kiev, and F. I. Leontovich in Odessa and Warsaw; at St. Petersburg Professor V. I. Sergueyevich, although an excellent lecturer and a great scholar, had no gift for training individual students. In Roman law the outstanding names were S. A. Muromtsev in Moscow, later speaker of the first Duma, Joseph A. Pokrovsky in Kiev, and David Grimm in Dorpat and St. Petersburg. Least successful was the training of research workers in such practical disciplines as civil and criminal law; in this direction legal practise in the reformed courts was of a much greater significance than university teaching.

The destinies of political economy and statistics took a peculiar course. Until recently progress in economics was not fostered primarily by the universities, but rather by the political and economic sections of the so-called "thick" reviews, which were not subjected to preliminary censorship. This situation was similar to that which existed in England in the early nineteenth century when the principal instrumentalities for the dissemination of economic knowledge were books, pamphlets and magazines rather than university teaching. Statistics being treated primarily as a special adjunct to

public administration, the best publications in the field, even when not strictly official, were not by university scholars but by persons in the government service, where the most adequate statistical training was to be found. Interest in statistical and descriptive economic studies was also stimulated by two learned societies which enjoyed the protection of the government: the Free Economic Society, founded as early as 1766; and the Geographical Society, founded in 1845. In the last quarter of the nineteenth century the statistical departments of the units of local self-government (*zemstvo*) had come to occupy a preeminent place as schools for Russian statisticians. *Zemstvo* statistics, though influenced by A. I. Chuprov, professor of political economy and statistics at the University of Moscow, and by A. F. Fortunatov, professor of agricultural economics in the Higher School for Agriculture in Moscow, can by no means be said to owe its existence to the lectures and studies of academic scholars. In the beginning of the twentieth century, however, a leading role in statistics was assumed by two university professors: A. A. Chuprov, master of mathematical statistics, and A. A. Kaufman, who became professor only after a long practise as administrative statistician.

One of the peculiar features of Russian economic teaching was the independent place allotted, after 1835, to public finance or, as it was officially called, "financial law." It was formally elevated to the rank of an independent discipline, and a special chair was created for it, as well as special degrees of master and doctor of financial law. Usually, however, at least until the twentieth century, it was taught by ordinary economists. Among the particularly prominent teachers of finance were: in Moscow, Yanzhul, Ozerov and Haensel; in St. Petersburg, Lebedev at the university, and Friedmann and Tverdokhlebov at the Polytechnic Institute; in Kiev, the Yasnopolskys, father and son, and Silin; in Kharkov, Migulin and Alekseyenko, who afterwards became a competent chairman of the budget committee in the Third and Fourth Dumas of the empire. However, few persons studied for a degree in financial law, and this separation of finance from economics, unknown either in Germany or in England, was scarcely a judicious measure.

Economic history was cultivated in the Russian higher schools both by historians and by economists. The most important contribu-

tion to the teaching of that subject was made by two historians, the mediaevalist Vinogradoff and the Russian historian Kliuchevsky. In the department of economics of the St. Petersburg Polytechnic Institute, economic history was a compulsory subject, its teaching being entrusted to one of the professors of political economy. The chair was occupied first by Ivaniukov and then by Struve. The courses given by the latter contained an exposition of historical sociology of economic life, industrial economics and commercial policy. In the law faculties of the universities economic history was an elective subject. In St. Petersburg it was for a long time taught by I. M. Kulisher, author of the most popular textbook of European economic history. Instruction in economic history was often combined with the history of economic theories. Such combined courses were delivered by A. I. Chuprov in Moscow, V. Levitsky in Kharkov, and S. Bulgakov in the Moscow Institute of Commerce.

Sociology was not taught until very recently in Russian universities or similar schools, but the sociological method, older and more influential than the formal science of sociology, was for a long time applied to the study of law, history and economics. In academic circles the outstanding sociologist was Nikolay Kareyev, a professor of history and author of numerous historico-philosophical and sociological works. He was closely connected with the Russian sociological school of Lavrov and Mikhailovsky. This group, although scantily represented in the halls of official learning, has made probably the most important Russian contributions to sociology in the nineteenth century. The researches of M. M. Kovalevsky, historian of legal and economic institutions, gave a considerable stimulus to the development of genetic sociology. With his assistance the well known Russian neurologist, Bekhterev, founded in St. Petersburg the Psycho-Neurological Institute, the first higher school in Russia where sociology was taught under its proper name.

A great improvement on the old university teaching, which provided no adequate vocational instruction in social science, was furnished by the department of economics of the St. Petersburg Polytechnic Institute, a new type of school established in 1903 on the initiative of the minister of finance, S. J. Witte, and of the famous chemist, Mendeleev. Political economy and statistics, taught in the faculties of history and philology or, after 1863, in the faculties of

law, were naturally subordinated to the major disciplines professed in these departments. In this new school and in the institutes of commerce modeled after it, instruction in all the economic sciences, including finance, was given on a very large scale, and the law disciplines were represented in proportion to their relevance to the study of economic institutions. Thus a prominent place was given to constitutional and international law and to civil and commercial law; some criminal law was taught, but no courses were given in Roman (*sensu stricto*) and canon law.

In this new school at St. Petersburg, elementary instruction in statistics and economic geography, which practically amounted to descriptive economics operating chiefly with statistical data, was given by two, and later three, special tutors who were themselves practical statisticians. Working under the general guidance of V. E. Dehn and A. A. Chuprov they coached individual students by offering them a series of concrete problems whose solution required familiarity with statistical sources and technique and the specific application of economic reasoning. This organization of practical exercises, unusual in Russia, determined the success of this school in the training both of practical statisticians and economists and of research men in these fields. For the latter valuable lessons were to be learned in the statistical seminar of A. A. Chuprov, which produced a series of valuable monographs; in the economic seminar of V. E. Dehn and P. B. Struve, which was engaged in a number of research projects in all branches of theoretical, historical and applied economics; and in the seminar on finance of M. I. Friedmann, later carried on with the participation of V. N. Tverdokhlebov. In the Moscow Institute of Commerce similar work was conducted by the late A. A. Manuilov and I. M. Goldstein. Numerous researches in descriptive economics, chiefly of Russia, originated in their seminar.

From the preceding description it is clear that the social sciences in Russia were considerably influenced both as systems of ideas and as teaching disciplines by borrowings and adaptations from abroad. As early as the eighteenth century the practise was inaugurated of sending young scholars to foreign countries. It continued in force until Russia was isolated by the World War and the revolution. After graduation the ablest of the students became stipendiaries either of the universities, which always disposed of

relatively large funds for this purpose, or of the corresponding government departments. The purpose of such traveling scholarships, however, changed substantially in the course of time. Originally young men were sent abroad to study in the literal sense of the term. Thus in the eighteenth century Lomonossov was studying with Christian Wolff in Marburg, and many other Russians with Achenwall in Göttingen. Later on the chief object of traveling scholarships was to enable young Russian scholars to study foreign sources and literature and to familiarize themselves with the conditions of scientific work prevailing in other more advanced countries. Fellows sent abroad were expected to render reports on their studies and observations, which were sometimes published. Such reports, published in the sixties in the *Zhurnal* (Journal) of the Ministry of Education and in many cases written by persons who afterwards distinguished themselves as scholars and teachers, form an extremely interesting source for the study of scientific life in Europe from the Russian point of view.

Familiarity with European culture led to an understanding of foreign systems of thought and made possible their adaptation to the peculiar problems with which Russian social sciences were confronted. Since the beginning of the nineteenth century Russian thought had been swayed by the same intellectual currents which dominated the rest of Europe. In the first half of the century the idealistic philosophy of Schelling and Hegel exercised a strong influence. Of the Russian Hegelians the best known was the Moscow professor of public law, B. N. Chicherin, a legal historian and philosopher of great penetration. In the fifties, sixties and seventies of the nineteenth century the influence of Comte, Spencer and J. S. Mill was dominant, and the latter's *System of Logic* was studied intensively in the law faculties. The influence of Buckle in the sixties and seventies of the last century is obvious even in the works of Soloviov and still more in the works of Shchapov and Nikitsky. Robert von Mohl and Lorenz von Stein were the standard authors in the field of political science. With A. L. Block, of the University of Warsaw, Stein's ideas were blended with a peculiar sociological nationalism of Slavophil coloring. The influence of Marx, in many points akin to that of Stein, was of course very great. Later the doctrines of Simmel, first introduced into Russia by the writings of Struve and the

university lectures of Kossinsky in Odessa and Kiev, acquired a considerable following.

As early as the forties of the nineteenth century the university teaching of statistics in Russia fell under the influence of Quetelet. It appears that his first Russian followers were Roslavsky-Petrovsky in Kharkov and J. Vernadsky, then of Moscow University. Economic thought was dominated in the seventies, eighties and nineties by German "socialism-of-the-chair," often mingled with the doctrines of Rodbertus and of Marx. The most influential teachers of political economy in Russia at that time—Chuprov, Ivaniukov, Issaev, Kablukov—were representative of that trend of thought. While their theoretical views were akin to Ricardo and still more to Marx, in the field of agrarian policy they rather sympathized with the Russian variety of socialism, the so-called populism (*narodnichestvo*) with its idealization of the village community. The main bulwark of economic liberalism, mixed with moderate "historism," was in this period to be found in the University of Kiev where the teaching of political economy and economic policy had been put on a firm footing by N. Ch. Bunge, founder of a real school of his own; his work was taken up by his pupil D. I. Pikhno and in the twentieth century continued by Pikhno's pupil A. D. Bilimovich. The influence of Jevons, Walras, Menger (as theoretical thinker, not as methodologist), Böhm-Bawerk and Wieser was not felt until very late; it blended in a peculiar way with the enormous influence of Marx and Marxism. It is curious to note that at the department of economics of the Polytechnic Institute in the period 1912-17 the populists Ivaniukov and Posnikov were succeeded by two former Marxists, Tugan-Baranovsky and Struve.

The development of scientific studies is vitally affected by the system of selection of the teaching personnel for schools of the university type. The Russian system, although orderly and well conceived, was characterized until the revolution by undue and harmful formalism. Any university graduate was entitled to be admitted to the so-called "magisterial" examination on a group of subjects pertaining to the faculty in question. As it developed towards the end of the nineteenth century this examination was essentially calculated for persons intending to devote themselves to scientific or professorial work. Those who passed it were entitled after two trial lectures to become

Privatdocenten in the appropriate discipline. The faculties, however, were allowed to admit as lecturer any person who had gained a reputation as a scholar, even though he had not passed the examination.

For the degree of master of a particular science (the first scientific degree) it was necessary also to defend a special thesis (dissertation); this, after 1863, had to be submitted in printed form. The examining board of the respective faculty was entitled either to admit that thesis for defense or to reject it, and it could pronounce the defense itself to be satisfactory or not (although in actual practice it was seldom refused). At first the thesis was not required to be scientifically independent and original, but from the seventies of the last century the *usus* of all the universities required that it be a piece of original research. Under the university statute of 1884, and up to the revolution, the defense of a thesis did not *ipso facto* confer any special rights upon the person who had defended it; he remained *Privatdocent*. However, by virtue of a special act which had to be ratified by the emperor, masters were often admitted to fill the functions of extraordinary and even of ordinary professors. Shortly before the revolution, when the office of regular docent which existed under the statute of 1863 was reinstated, the granting of a master's degree conferred a formal right upon its recipient to fill that office. The second and the highest degree, that of doctor, was granted when a second printed thesis was defended. It conferred upon its recipient a formal right to professorship.

This system, which in its main features originated in the first half of the nineteenth century and which was incorporated in the statute of 1863, encouraged the development of Russian learning in its crucial early stages. In the course of time, however, the shortcomings of the system became increasingly evident. Anyone who had passed the magisterial examination could obtain the right to teach in the higher schools, even though he had not published a single scholarly work. On the other hand a person who had scientific works to his credit but who for some reason had not passed the magisterial examination could become a *Privatdocent* with the permission of the university authorities, but had no chance of getting a professorship unless it occurred to some university to grant to him a doctor's degree *honoris causa*. In other words, a man's ability

to fill a professorial office was determined by a purely external test and not by any appreciation of his intrinsic qualities as scholar. As a result there could often be found among the professors persons who had completely fulfilled the formalities required of them, but whose qualities as scholars were almost negligible. Just before the revolution it became clear that some kind of reform was urgently needed in the organization of university promotions and admissions to professorships.

PETER STRUVE

II. SOVIET RUSSIA. In pre-revolutionary Russia the social sciences were taught in the eleven universities in the faculty of law and the faculty of history and philology. In the former were trained the lawyers and officials of bourgeois Russia; in the latter the instructors of secondary schools. With the collapse of the capitalist order the need for lawyers declined very considerably, and professional officialdom was dispensed with in the Soviet administrative machinery, which is run in large part by elective officials and for the rest by amateurs among the more intelligent workmen and peasants. The superfluity of law faculties was so patent, and they were so obviously breeding nests of reactionary ideologies and counter-revolutionary opinions, that at first they were suppressed altogether. Later, when a sufficient number of jurists with a thorough Marxist background were trained, several law faculties were reopened under the name of faculties of Soviet law. Their purpose is primarily to prepare court and prison personnel—judges, prosecutors, criminal investigators, members of commissions on child delinquency, jurisconsults, notaries—and officials for the diplomatic and commercial representations of the Soviet Union abroad. Soviet law faculties exist now in five out of thirteen universities of Russia proper (Russian Socialist Federation of Soviet Republics): Moscow, Leningrad, Saratov, Kazan and Irkutsk.

The transformation of the faculty of history and philology was somewhat similar to that of the faculty of law. After the revolution these faculties were no longer needed, because the training of teachers for secondary schools was taken over by pedagogical faculties and institutes organized especially for that purpose. They were used therefore as the basis for the faculties of social science, established soon after the Soviets came into their own. Some

of their departments served as a foundation for the faculties of anthropology. At present there are faculties of anthropology in Moscow, and of linguistics and history of material culture in Leningrad. These are engaged principally in the training of ethnographers for work among the numerous nationalities of the Soviet Union and also of staff members for the many museums; to some extent they also prepare students for future scholarship in the field of ethnography, linguistics, history and archaeology.

Having thus reduced by more than half the number of old faculties in which the social sciences were taught, the Soviet government has developed extensively the system of higher schools of economics. Their pre-revolutionary prototype was the institute of commerce, founded and supported largely by individuals and private organizations. After the revolution these served as nuclei for institutes of national economy with a considerably extended teaching program. The largest of them, the institute named after Plekhanov in Moscow, may be taken as typical. It consists of three faculties, electrical-industrial, technical and economic, and is thus a combination of a technical and an economic school. Although the faculties are quite independent and have different programs, nevertheless the bringing together under one roof of technology and economics makes it possible to train the type of graduate wanted—a practical economist well oriented in technical disciplines and having a broad economic outlook. The social sciences taught in the first year in the economic faculty are economics and economic geography, European, American and Russian economic history, and statistics; additional courses are given in higher mathematics, physics and chemistry. In the second year, besides a continuation of general economics, there are special courses in the economics of industry, public finance and business law, and courses in technology and the qualities of merchandise. In the third year the students are divided among the commercial, industrial and statistical sections; all of the students, however, take courses in international economics, Soviet economic policy, history of economic doctrines, agricultural economics and business law, as well as the third year of general economics. In the sections there are certain compulsory subjects; in the industrial section, for example, the requirements include the economics of Russian industry, business cycles, industrial statistics,

industrial accounting, labor law, and special elective sequences for separate branches of industry (metals, textiles, petroleum, coal mining and leather). The Industrial-Economic Institute named after Rykov in Moscow, the Institute of National Economy named after Engels in Leningrad, the economic faculties of polytechnic schools and of the Timiryazev Agricultural Academy, are similar to the Plekhanov Institute.

In addition to the organizations named, in which the social sciences constitute the chief subject of study, there are a number of special schools in which these sciences are taught. To this group belong in the first place pedagogical faculties and institutes, of which there are eighteen in Russia proper. They have special social-economic departments comprising two sections, that of the science of society and that of economic geography. The first offers training to teachers of social science in the secondary schools, the second prepares for the same schools teachers of economics, economic geography and statistics. The teaching program of these sections includes economics, statistics, European and Russian history, elements of constitutional and economic law of Soviet Russia—in short, the same subjects that are taught in the institutes of national economy and in the faculties of Soviet law and of anthropology, but in a less specialized form. For instance, general economics is given in these departments only for seven hours a week in the first and second years (two hours of lectures, two hours of elementary seminar and three hours of advanced seminar work), while in the Plekhanov Institute the same subject is allotted ten hours for three years (four hours of lectures and six of seminars).

The teaching of the social sciences in the universities and institutes of Soviet Russia is not limited to the comparatively special courses described above. There is no faculty—not even the medical—in which some phase of social science is not taught as a subject of general educational value, for the government believes that no expert, however technical the character of his work, can be really useful in the Soviet state unless he is socially minded. Thus in the medical faculties are found provisions for seven hours a week of social science in the first two years of study. In the schools of geodesy twenty-two hours a semester are given to social sciences, or 6 percent of the entire number of hours; in the schools of agriculture these sci-

ences account for 6.5 percent of the total study program; in the department of metallurgy of the Moscow Mining Academy (just as in other faculties of the same type) they amount to 5.5 percent of the program. A considerable part of these courses is of a practical nature and is intended to convey to the students concrete information on Soviet constitutional law and economic policy, on trade unionism, etc. The latter is of direct interest to the students, all of whom are members of trade unions. However, courses of a theoretical character are also given. Of this nature are the courses on historic materialism and on general economics. In their practical aspects these courses are adapted to the interests of the particular vocation for which the school trains its student body. Thus in the industrial faculties more time is devoted to the industrial policy of the Soviet state and to labor law. In departments of agriculture emphasis is laid on the agrarian policy of the Soviets, rural social relations, etc.

A sequence of courses in social science forms a compulsory part not only of higher education but also of general primary and secondary education. The elements of social science are included in the programs of all schools, beginning with the fifth year. In this year a separate single course is given, combining the elements of economics, political science and history. It starts with a general characterization of industry; by using concrete examples some notion is given of the superiority of large scale machine production over small. Then follow data on the position of the working class prior to the revolution and at present, on the conditions in the village before and under the Soviet government, and on the economic and cultural ties between the city and the country. In the sixth year the pupils learn of the important developments in the economic life and social history of foreign countries (the industrial revolution, the French Revolution, the international labor movement, etc.). The seventh year is devoted to the modern period. The course begins with a description of the system of imperialism, which is followed by a detailed account of the history of this period (especially in Russia) and a comparison of the constitutions of the members of the Soviet Union with those of other states. In the eighth and ninth years more specialized courses are given in the same subjects, approaching in their scope those offered in the universities. Before the eighth year the teaching of history does not go farther back than the

eighteenth century, but in the last two years feudalism, the age of discoveries and the sixteenth and seventeenth centuries are covered.

The social sciences are also taught in a number of schools for adults, such as workmen's faculties (special schools preparing workmen for the universities) and Sunday universities. In content the courses given there do not differ from those just described, although in matters of exposition they are adapted to the age and background of the student body.

The fact that the social sciences in one form or another are now taught in all schools of the university type is responsible for a large demand for social scientists with professorial qualifications. At the very start the problem of training a considerable number of such persons was the most urgent that confronted the Soviet government in the field of higher education. The government made a brave beginning by establishing in 1921 the Institute of Red Professors, at that time a series of seminars for young Marxists. Since then the training of a university teaching personnel has been systematized and organized on a much larger scale.

At present the abler graduates of universities who choose a professorial career become "aspirants" and are granted scholarships by various institutions. The scholarship covers a term of three years, and at the end of that time the aspirant is supposed to present and defend at a public debate the results of his independent researches in his special chosen field. In Russia proper the training in economics is given in the Institute of Economic Research, the first half of the three year course being set aside for general training and the second being used for specialization in one of the fields, such as economics of industry; economics of commerce and cooperation; money and credit; public finance; international economics; and economic geography. In the Institute of Soviet Law the aspirants are prepared for the teaching of law. The special fields here are those of constitutional law, international law, criminal law and procedure, business law and civil procedure, labor law, agrarian or land law. In the Institute of History every aspirant begins in the seminar on historic materialism; in the course of his study he is supposed to work up two topics in his special field (which may be ancient history, mediaeval history, modern history, Russian history, contemporary Russian history or anthropology) and two topics in two of the other

divisions of history. In his last year of training every aspirant is supposed to teach in a university in his special field and to present to the corresponding institute a detailed outline of his course. Approximately the same study plan and the same requirements are adopted by the Institute of Red Professors, which has the following social-scientific departments: economics, with a separate sequence of agricultural courses; cooperation; history with subdivisions of western history, oriental history and Russian history; history of the Communist party; and law. The students of this institute have a four year course of study and are supposed to teach during the last two years of residence. The old Academy of Sciences also has a small number of aspirants (they are called "practicants"). A score of young scholars having the rank of junior scientific contributors are attached to the Communist Academy. The total number of persons in training for professorships and research in the social sciences is about one thousand for the entire Soviet Union.

As already indicated, at least half of the period of preparation for university teaching is devoted to research. It is not surprising, then, that the scientific output of the schools for professorial training is quite large. The total number of published titles credited to the students of the Institute of Red Professors reaches 3000, including 800 separate books and pamphlets. The institutes of Soviet Law, of Economic Research and of History form together the Russian Association for Research in the Social Sciences. This association, although it was organized only in 1923, has already published a considerable number of works.

Organized research in the social sciences is not limited to institutions designed primarily for the training of university personnel. At the present time there are in Russia a large number of organizations giving their entire time to research. Of these the principal one is the Communist Academy established in 1918 as the Socialist Academy of the Social Sciences. It is now a vast congeries of scientific institutes and learned societies, of which the following are specifically social-scientific: the Agrarian Institute, the Institute of International Economics and Politics, the Institute of Soviet Organization, the Society of Historians-Marxists and the Society of Statisticians-Marxists. In addition the Communist Academy has sections of economics and of law and government and

issues a number of periodic and non-periodic publications. The *Viestnik Kommunisticheskoy Akademii* (Herald of the Communist Academy), serving the interests of the organization as a whole, is a magazine with a file at present of thirty issues; it prints articles dealing with methodological problems. *Na Agrarnom Fronte* (On the Agrarian Front), *Mirovye Khoziastvo i Mirovaia Politika* (International Economics and Politics), *Vlast Sovetov* (Soviet Authority), *Istoriia Marksizma* (Historian Marxist), *Voprosy Ekonomiki* (Problems of Economics), *Revolutsiia Prava* (Revolution of Law), are magazines serving as outlets for the respective institutes, societies and sections. Organizations for general social-scientific research outside of Moscow include the Institute of Marxism at Kharkov and the Leningrad Institute for the Study of the History and Theory of Marxism. The Ukrainian Academy of Sciences in Kiev has a special chair of Marxism and Leninism; and the White Russian Academy of Sciences also devotes a great deal of attention to the history and economics of White Russia. According to the last draft of its charter (1927), even the old Academy of Sciences in Leningrad devotes considerable attention to the whole range of the social sciences, not limiting itself to history, as it did before the revolution. After the new elections (1929) four economists joined its ranks, which contain now eleven historians but as yet no jurists. This list must be supplemented by the inclusion of two very large special organizations: the Marx-Engels Institute, with enormous archives and the largest library on Marxism in existence, which publishes the results of its researches in *Arkhiv Marksa i Engelsa* (The Magazine of Marx and Engels) and in *Lietopis Marksizma* (Annals of Marxism); and the Lenin Institute which has extensive archives and a library and is engaged in publishing Lenin's works and correspondence.

The study of the social sciences in Soviet Russia in all research organizations and in schools of all types is based on a single scientific method, that of dialectic materialism. Only a few establishments (including until recently the Academy of Sciences) and a few of the scientists of the old school fail to reflect in their work the influence of this method. Practically all young scholars are Marxists. In the last few years, with the complete strengthening of the economic foundations of the Soviet Union, all traces of wavering in this respect have disappeared. Simultaneously with the establishment

of the Marxian method there has occurred a significant change in the subject matter studied. In the field of law, for instance, abstract investigations in Roman law and other subjects having little relevance to legislative practise of the day predominated in the pre-revolutionary period. At present organizations for the study of law function as laboratories out of which come the fundamental principles of Soviet legislation. The codes of civil and criminal law with all their later modifications are based on a long reworking of the corresponding topics in the Institute of Soviet Law and the section of law and government of the Communist Academy. The new land code was turned over for preliminary discussion to this academy by special resolution of the government. The work of economic research agencies is very closely connected with the administration of national economy. Each of the government bureaus charged with the management of the economic affairs of the country has research divisions (the Supreme Council of National Economy has a score of them) furnishing the scientific basis for its work. An overwhelming majority of economic research projects are therefore an outgrowth of the current problems of economic management (reconstruction, balanced economic development, tempo of economic development, rationalization, etc.). Other investigations attempt to summarize the changes introduced by the revolution into economic institutions and to provide a theoretical analysis of these changes. Of this nature is the work of the Commission for the Study of the Consequences of the Agrarian Revolution, attached to the Communist Academy, and the work of individual scholars, such as the book of N. I. Bukharin on the economics of the transition period (*Ekonomika Perekhodnogo Perioda*, Moscow 1920, tr. into German as *Oekonomik der Transformationsperiode*, Hamburg 1922) or that of L. Kritsman on the economics of military communism (*Geroicheskiy Period Velikoy Russkoy Revoliutsii*—The Heroic Period of the Great Russian Revolution—2nd ed. Moscow 1926). In the field of history, ancient and mediaeval history have lost ground in comparison with modern history. Instead of discussing the origin of serfdom or the character of the authority of the feudal lords in old Russia, scholars inquire now into the nature of Russian imperialism and the causes of the World War. Analogously in European history, instead of the interest in the mediaeval village, a subject

carefully studied by the students of Vinogradoff, may be observed the emergence of an interest in the party conflicts of the French Revolution or in the Paris Commune of 1871 (the works of Lukin and his students). This does not mean, however, that the general study of Russian history or of world history is entirely neglected. On the contrary, a whole range of problems could be scientifically posited and widely discussed only in Soviet Russia. Such are questions of the origin of religion, of the personality of Christ and the origin of Christianity, of the class struggle in antiquity. At the same time young Marxist scholars carefully study the works of their bourgeois predecessors. Among the books published by the Institute of Red Professors there is a large group presenting a detailed analysis of the views of various Russian historians beginning with the first half of the nineteenth century. No such aid to the study of Russian historiography was available in pre-revolutionary Russia.

From the social sciences the method of dialectic materialism is being taken over with some success into adjoining fields. Especially brilliant applications of this method have been made in linguistics. The newest theory of the origin and development of languages, put forward by the academician Marr and his school, is essentially a Marxist theory, even though Marr arrived at his conclusions, independently of any theoretical assumptions, by observation of the actual development of various tongues,

primarily those of the Caucasian tribes. In ethnology and ethnography Professor Tan (Bogoraz) is close to the materialistic school, although he is farther from Marxism than Marr. Yet Tan has many students who are consistent Marxists, so that the appearance of a Marxist school of ethnologists can be expected in the near future. Finally, in the last few years dialectic materialism has exerted a decisive influence on the study of natural sciences; the problem of a dialectic of nature is of the greatest interest to young biologists, chemists and physicists in Soviet Russia.

M. POKROVSKY

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VII

Scandinavia

In Denmark, Norway and Sweden the universities take the lead in promoting the social sciences, both on the teaching side and in the work of research. There are state universities, with complete curricula, in Copenhagen, in Oslo and in the Swedish cities Lund and Uppsala. There are also, in Sweden, two private universities located at Stockholm and Gothenburg. The University of Gothenburg is incomplete in that it teaches only the humanities. Most of the social sciences are taught in all of these universities.

The first chair of economics in Scandinavia was founded in 1740 in the University of Uppsala and was known officially as *jurisprudentiae, oeconomiae et commerciorum professio*. One of the first persons to occupy this chair, P. N. Christiernin, was the author of some remarkable work in monetary and foreign exchange theory around 1760, anticipating parts of contemporary and later doctrines in English political economy.

Copenhagen obtained a chair of *Kameralwissenschaft* in 1785, from which economics was taught. In Oslo a chair of land economics, political science and technology was established in connection with the faculty of philosophy in 1814. Three decades later it was transferred to the faculty of law, where it was occupied by A. M. Schweigaard, a brilliant writer on monetary and tariff problems. In the last few decades there has been a tendency to free economics from its traditionally intimate connection with law. However, in Uppsala, Lund and Oslo the chairs of economics still belong to the faculties of law. In the two former universities they cover the subjects of economics and financial law; in Oslo the chair combines instruction in economics and statistics. The universities in Copenhagen and Stockholm have faculties of law and political science. The chairs of economics belong to the political science section in Copenhagen and to both sections in Stockholm, where there is also a chair of economics in the humanities faculty. In Gothenburg economics is associated with the humanities.

The university colleges of commerce in Stockholm and Gothenburg, and the University College of Technology of Trondhjem (Norway), all of undoubted university standing, also have professors of economics.

The number of chairs with or without such additional subjects as statistics or financial law is eight in Sweden, four in Denmark and three in Norway. In addition there are a number of assistant professors (docents) and lecturers in the institutions already mentioned and in special institutes for higher studies of technical subjects, forest problems, etc.

In Sweden political science has long attracted a great deal of attention. As far back as three hundred years ago the University of Uppsala established a chair of political science and rhetoric in connection with its faculty of philosophy, and later the universities of Lund and Gothenburg established chairs of political science. The three law faculties have chairs of constitutional law and devote special attention to the legal aspects of political science. Similar chairs exist in the universities of Copenhagen and Oslo.

Sociology has been rather neglected in Scandinavia. Nowhere is there a chair exclusively devoted to this science. Gothenburg University has a professorship of economics and sociology. From 1883 to 1918 Copenhagen University had one dealing with philosophy and sociology. At present the teaching in sociology is done by one of the professors of economics.

In Lund and Uppsala sociology has been classed as a branch of practical philosophy. Some of the professors have lectured and written on sociological topics in the speculative and abstract manner which dominated sociological science everywhere in the last century. Newer tendencies of sociological thought of a more concrete sort have hardly become known to Swedish students, except in Gothenburg.

Among other sciences treated in a way that makes them akin to the social sciences history should be mentioned first of all. Particularly in the last two decades leading historians have

begun to place emphasis on economic and sociological factors. This tendency, which is a reaction against excessive concentration on the purely political aspects of history, is perhaps more conspicuous in Norway than in Denmark and Sweden. But in all three countries economists and historians have become aware of the necessity of cooperation in the treatment of subjects which border on their respective sciences.

The law faculties in all the Scandinavian universities with complete curricula have long had chairs of legal history and public law. The treatment of these subjects by the different professors has been varied. In some cases the sociological viewpoint has played a prominent part and it tends more and more to come to the fore. The same tendency can be found in the treatment of other branches of the legal sciences.

Recently some professors of psychology have dealt with the social aspects of their subject. The economic aspects of geography have been given increasing prominence. Anthropology is not taught in Scandinavian universities, except in connection with anatomy, archaeology and ethnology. Students of the two latter sciences naturally acquire some contact with the social and sociological viewpoint.

Ever since 1848 the University of Copenhagen has had a special degree for the students of social sciences, *candidatus politicus*. In general five and a half years of study are required, which corresponds to an American post-graduate course of about three years. Economics is the principal subject studied, but statistics, sociology, economic history, public law, constitutional law and other subjects are also included. The University of Oslo has a similar examination in economics and statistics, but its preparation takes only half as long. In Sweden the social sciences can be combined with any other subject taught in the philosophy or humanities departments. The law students in all three countries study a little economics. In the university colleges of commerce economics, economic geography and statistics naturally play a large part.

The teaching used to be done by means of lectures, sometimes supplemented by the discussion of papers in seminars after the German pattern. In late years discussions and laboratory work have come to play a more important part. Nevertheless the "case method" has not had much influence on the mode of teaching. Absolute freedom of teaching is an old tradition

in Scandinavian universities and is jealously guarded. There is no danger that a scientist's views, whether radical, communistic or of any other tendency, will furnish the occasion or the pretext for preventing him from teaching.

Various social sciences are taught outside of the universities. In Sweden this kind of instruction is given at the Institute of Social Policy and Municipal Government, the Citizens' School and the Workers' Institute. Folk high schools in the country districts and circles of study under the direction of scientists in the four university towns should also be mentioned. In Denmark the Teachers' High School, the Workers' High School and various folk high schools give elementary courses in social sciences. The Folk University Association also arranges series of lectures on social subjects. In Norway there are folk academies and workers' institutes. The Nobel Institute in Oslo has recently appointed a couple of lecturers on the social sciences.

In all three countries the business schools teach elementary economics, and the higher ordinary schools and seminars for primary school teachers give some instruction in "knowledge of society." A number of associations of present or former students of the social sciences arrange lectures and discussions. These associations are separately organized in connection with each science, such as economics, political science, etc. In Sweden the Academy of Sciences has a special economics section, and in Norway the Academy of Sciences has a section devoted to the legal and social sciences. In Denmark social scientists are not represented in the corresponding institution, which includes only a limited number of the "older" sciences.

The foundations which exclusively support research in the social sciences, e.g. the Fahlbeck Foundation at Lund, and the Aschehoug Foundation in Oslo, are small. Foundations for the advancement of scientific work in general are of course numerous, but some of the largest concentrate on subjects other than the social sciences. A notable exception is the Carlsberg Foundation in Copenhagen which has given large amounts to promote research in economic and social history. It also supports the Institute of Economics and History which, aided by grants from the Laura Spelman Rockefeller and the Rask-Ørsted foundations, carries on research and teaching in connection with economics and economic and social history. The Commodity Insurance Foundation in Oslo gives

considerable amounts for research in economics.

The university and the University College of Commerce in Stockholm have joined in creating the Institute of Economic History. The Institute of Social Sciences is a part of the same university, and has received a grant from the Laura Spelman Rockefeller Foundation to be used in an intensive study of wage problems.

It is not difficult for young scientists to obtain grants from various foundations for defraying at least a part of the cost of printing their works. On the other hand scholarships for students of the social sciences abroad are rare, particularly in Denmark.

Among the publications devoted to the social sciences should be mentioned those edited by the Fahlbeck Foundation in Lund and by the economic section of the Academy of Science in Stockholm, both in Swedish, and the series published in English by the Stockholm Institute of Social Sciences. The most important scientific journals are: *Ekonomisk Tidskrift* (Uppsala), *Statsvetenskaplig Tidskrift* (Lund), *National-ökonomisk Tidskrift* (Copenhagen), *Statsökonomisk Tidskrift* (Oslo) and *Nordisk Statistisk Tidskrift* (Stockholm). In each country a government department dealing with social affairs publishes a monthly or bi-weekly journal, which sometimes contains articles of scientific interest. Historical and legal periodicals which include

articles of interest to students of the social sciences are numerous.

Before the war the place of the social sciences in Scandinavian culture was rather insignificant. Undoubtedly, however, the cultural influence of the social sciences is growing rapidly. Their point of view is permeating all related sciences. In this way students of history, archaeology, ethnology, psychology and law come into contact with the social science viewpoint. The average "educated" man or woman is forced to give much more attention to the subject matter of the social sciences than was the case a generation ago. Economics, in particular, is growing in importance. This is partly a result of the war and the post-war crisis, which raised so many economic problems. It is partly due, however, to the energetic work carried on through small books and newspaper articles by Scandinavian economists in behalf of the "popularization" of economics.

The social sciences have not yet come to be regarded as a unit or natural group, a fact which may have something to do with the neglect of the most comprehensive of them all, sociology. As interest in sociology is lively among students in every branch of the social sciences, efforts to remedy the existing state of affairs will probably be successful within a short time.

BERTIL OHLIN

VIII

Spain and Portugal

It would be difficult to say precisely when the social sciences became the subject of scientific study in Spain. Mediaeval philosophic thought differed considerably from the social sciences in the modern sense. It was complicated by its threefold division into the Jewish-Spanish, Hispanic-Arabic and Christian strains, by the vastness of the subjects which it treated, and by the intellectual boldness with which they were attacked. An arbitrary starting point can be made in the sixteenth century, the decisive moment in the European cultural renaissance.

The outstanding work of that time was done, as was natural from the institutional character of the period, in the field of ecclesiastical and political theory and law, and in colonial history and geography. We may mention first the works of Juan Luis Vives, *De subventionem pauperum sive de humanis necessitatibus, libri ii* (Burgos 1526, tr. by M. M. Sherwood, New York 1917), and *De causis corruptarum artium* (Burgos 1531); *De rege et regis institutione* (Toledo 1599) of the famous Jesuit Mariana, which made such a marked impression on the theories of the monarchomachs; and the work which is now attracting the attention of internationalists, the *Relectiones* (Lyons 1557) by Francisco de Vitoria, professor in the University of Salamanca, an advocate of theological and legal reform. The social significance of Vitoria's contribution to the study of international problems eluded the appreciation of most of his contemporaries. As the first quarter of the seventeenth century was drawing to a close, Francisco Suarez published his *De legibus ac deo legislatore* (Antwerp 1613), which unequivocally proclaimed the doctrine of the solidarity of nations—the *mutua iuvamine*—or the necessity of mutual support as the basis of international law. It has been disputed whether Vitoria or Suarez was responsible for the doctrine; Lange and Barthélemy credit Suarez, while James Brown Scott believes that Vitoria was the real creator of the idea. Historians of the West Indies also made valuable studies on the social conditions of the American aborigines which formed a basis for the more accurate work which followed.

Especially important in this respect is the notable *Historia general y natural de las Indias* (Seville 1535-37) by Gonzalo Fernández de Oviedo y Valdés; the *Historia verdadera de la conquista de Nueva España* (first published Madrid 1632) written by Bernal Díaz del Castillo, a soldier who served under Cortes; and in addition the works published by Augustin de Zarato, Pedro de Cieza de León and Alvar Núñez Cabeza de Vaca, to cite only the most famous among these early writers. The geographers in their turn revealed new horizons in what is now called human geography, as was recognized by Pietro Martire d'Anghiera, a Milanese chaplain to the crown of Castile, in his *De orbe novo* (Alcalá de Henares 1530) and by the less known cosmographer of the Indies, Juan López de Velasco, who wrote the excellent *Geografía y descripción universal de las Indias* (1574, first published Madrid 1894) including a census, a description of the settlements, a study of customs and of Spanish colonization in general. A similar document for the English colonies is not found until the time of Chalmers.

But the general impoverishment of Spain and its political decadence could not fail to influence national thought. In the sixteenth century under Charles V and Philip II, for religious as well as for economic reasons, a decided drift set in toward the "closed economic state." In fact the mercantilist tradition, as Schmoller has pointed out, was a growth of great antiquity in Spain, dating probably from the end of the reign of James I of Aragon in the fourteenth century. As national depression reached its maximum in the course of the seventeenth century, men appeared who gave voice to the national needs and formulated programs of economic reform in mercantilistic terms. This literature began with the *Restauración política de España* (Madrid 1619, reprinted 1746) of Sancho de Moncada, and continued down to the nineteenth century. Moncada favored an anti-export law for raw materials and metals in order to stimulate the industry of the country. Later Francisco Martínez de Mata published his *Memorial en razón de la despobla-*

ción, pobreza de España y su remedio (n. p. 1650), reprinted by P. R. de Campomanes in his *Apendice a la educación popular* (4 vols. Madrid 1775-77); in this work the problem centers more on protection and other means of encouraging manufactures, as the only way to produce wealth and bring about an increase of population. Meanwhile the economic-political decadence continued and when the house of Austria was superseded by the house of Bourbon (1701), the regeneration of the exhausted country was no longer merely a matter of academic discussion but the compulsory text for all thinkers. The man who knew how to give scientific form to the convictions of the cultured men of the time was Jeronimo de Uztariz, who marks the culmination of Spanish mercantilism. His famous *Teórica y práctica de comercio y de marina* appeared in 1724 in Madrid and spread rapidly through Europe; an English translation appeared as early as 1751 and a French translation by Forbonnais in 1753. His plea for "well protected and better regulated commerce" enjoyed the support of such statesmen as Patino, adviser to Philip V, who mentioned it in the memoir which he presented to the king in 1726.

The general national renaissance in industry and science under Charles III (1759-88) had particularly important consequences for the social sciences. In that period university studies were reformed and the modern viewpoint was introduced into the teaching of philosophy and law (which included the study of political economy). However, the reform of the economic and related disciplines did not take place in the universities, but outside them, in the Sociedades Económicas de Amigos del País founded in all the provinces of the peninsula as well as overseas. These societies promoted research, held prize contests for the best pieces of writing and by means of their publications spread throughout the country an interest in financial, commercial, industrial and agricultural problems. Although the societies still exist they have deteriorated during the past century; however, they still have valuable libraries which are open to the public and records which are of the greatest importance. These records, especially the publications of the Sociedad Económica Matritense (*Memorias*, 5 vols. 1780-95; *Anales*, 3 vols. 1852-54), are equaled by no other scientific source material in the light they shed on the situation in Spain and its colonies at the end of the eighteenth and the beginning of the nineteenth century.

The progress of Spain in the eighteenth century and the liberal movement symbolized by Charles III were interrupted, the latter by the fear which the French Revolution inspired, and the former by the Napoleonic invasion, the general uprising and the internecine wars in which Spain was involved for five years. Business was ruined. The constitutional regime which was established in 1810 attempted to reorganize the national administration, but was handicapped by the vicissitudes which beset it until its fall in 1834. Yet the social sciences did not cease to be an object of study. In 1794 the first translation of Adam Smith's *Wealth of Nations* had been made by A. Ortiz. Even though it was proscribed by the Inquisition on grounds of "low style and moral license," that did not affect its spread inside and outside the universities. In fact the proscription had earlier been an incentive to its diffusion, especially after the first years of the French Revolution had passed and the Inquisition had been weakened never to be restored, dying legally in the Cortes of Cadiz in 1810. The renown of Adam Smith was later shared by J. B. Say, the works of both enjoying the character of recognized texts.

This second period, which includes the eighteenth century and the beginning of the nineteenth, was marked by constructive programs and achievements in public affairs and by development in the social sciences. It was the period that began with the census of the Marqués de la Ensenada in 1748 and ended with the census of de la Riqueza of 1800, directed, it seems, by Campomanes. This period witnessed the projects of Campillo for the economic-commercial reorganization of Spain and its colonies, the founding of the San Carlos bank, the writings of Forner and Salazar on the political and economic reconstruction of Spain, and the publication of the voluminous work *Origen, progresos y estado de las rentas de la corona* (7 vols. Madrid 1805-08) of F. Gallardo y Fernandez, giving a history of taxes in force at the beginning of the nineteenth century and outlining the administrative organization of the treasury. It was a period further distinguished by the work of Aranda, Floridablanca, Cabarus, Jovellanos and Canga-Arguelles. In the period that followed—the first half of the nineteenth century—the chief economists were A. Florez Estrada, the author, among other works, of a *Curso de economía política* (first edition in London, 1828, the seventh and last edition in Oviedo, 1852; translated into French by Gali-

bert, Paris 1833) and Ramón de la Sagra, whose *Lecciones de economía social* were published in Madrid in 1840. Estrada was praised by Blanqui in his *Histoire de l'économie politique* (2 vols. Paris 1837, vol. ii, p. 300-02) while an interesting study of Sagra was written by Viscount Alban de Villeneuve-Bargemont in the *Journal des économistes* (vol. vii, 1844, 358-80). Both Estrada and Sagra are again being studied by the new generation of scholars. The first commercial code in Spain was published by Pedro Sainz de Andino in 1829, and in 1830 ex-Minister F. J. de Burgos delivered some *Lecciones de administración* in the Liceo of Granada, which form the basis of the subsequent development of the theory of public administration.

Two events must be stressed as fundamental in the present position of the social sciences in Spain: the Revolution of 1868 and the Spanish-American War of 1898. The first of these had as one of its antecedents the great university dispute which arose in 1866. The government representing the greatest power reached by the ultramontane forces, supported by Rome and by similar strong groups in Austria and France, demanded, because of political reasons in which it was deeply involved, a special oath of allegiance to the queen and to the official religion. The concordat between Spain and the Holy See, which was signed in 1851, had granted to the church the right to supervise instruction and gave a semblance of legality to the act of the government, although actually the arrangement was never put into practice in the university centers. A group of professors refusing to do what the government required resigned their posts only to resume them when the Revolution of 1868 proclaimed the principle of absolute academic freedom. From 1868 to 1876 the University of Madrid was the center of reform which found expression in liberal courses and in the university organ *Revista* (1869-77). In 1876 the monarchical restoration again raised the question that had been raised a decade earlier, although the government now asked only for inspection of the curricula in order to preserve purity of doctrine. A still greater number of professors refused. They were expelled and in 1876, under the leadership of Francisco Giner, founded the Institución Libre de Enseñanza, which is still in existence and which was the home of the Spanish intellectual revolution. Although this institution started as a liberal university, it later became a primary and a secondary school, the leader in pedagogical reform, and an advocate

of coeducation and of religious neutrality. Its influence in the country has been enormous.

In 1881 the government receded from its position of 1876 and thenceforward the Spanish professor enjoyed as complete academic freedom as his English colleague. In Spanish universities today, professors in conflict with such institutions as the monarchy, the Catholic religion (and concretely with the church) and the capitalistic property system, are not as a rule hampered in their activities. But this struggle stimulated the doctrinal polarization of the social sciences in Spain, giving rise to what may be considered the two schools of Spanish thought around which the names of the principal social scientists may be grouped. On the one hand the traditional Catholic school was revived with the sap of Christian socialism and gave place in our day to Christian democracy with its well-known influence on the life and legislation of the country. In this group the profound ideas of Donoso Cortes, the most celebrated of the Spanish ultramontanes, have ceased to hold sway and have been superseded by the social doctrines of Leo XIII; representative of this trend are Sanz y Escartin, Aznar y Embid, Sangro y Ros de Olano, Burgos Mazo and Ruiz del Castillo. On the other hand the liberal spirit of the Revolution of 1868 has descended upon the school that upholds the doctrine of the social organism as an ethical entity. The doctrine was inspired by German idealism, especially by Krause, and expounded and spread by Julian Sanz del Rio, professor at the University of Madrid. The real founder of this school was Francisco Giner de los Rios, professor at the University of Madrid, who founded the Institución Libre. He was the author of works on Spencer, Schäffle and Wundt which widely attracted the attention of scholars. His individual viewpoint appears most clearly in the *Resumen de filosofía del derecho* (Madrid 1898), *La persona social; estudios y fragmentos* (Madrid 1899), and in the work presented at the International Congress of Sociology in 1898, *La ciencia como función social*. Giner left a profound impression upon Altamira, Costa, Dorado Montero, Buylla, Bernaldo de Quirós and Posada. Positivism also found representatives in Sales and Ferrer (*Tratado de sociología* 1897) and the criminologist Salillas.

The defeat in the war with the United States in 1898 and the resulting loss of the last possessions of Spain in America had a cathartic or purifying effect on Spanish social thought. As

a result of the war there arose a historical literature in which the past and present were frankly analyzed; and extra-university institutions were created to cope with the pressing social problems. The new doctrines began to be discussed and new points of view put forward in the Ateneo Científico y Literario y Artístico at Madrid. Likewise the Real Academia de Ciencias Morales y Políticas took part in the new movement. It not only held discussions but organized scientific competitions, offering generous financial awards for the best monographs. As has happened at other times, the universities took no active part in developing the new social disciplines and comparatively little is being done there even at present. Sociology is represented by only one chair in the faculty of philosophy in the University of Madrid and by another one on "social policy" under the faculty of law. Under these faculties social studies are being made in connection with Roman law, politics, and commercial, administrative, criminal and international law. The study of economics and finance is also supervised by these faculties. Studies in anthropology, prehistory, ancient and mediaeval history are carried on under the faculties of history and science. Recently a new chair of municipal law was established, which is held by the scholar Posada.

In the Museo Pedagógico Nacional, officially established in Madrid in 1885-86, a corps of technicians, working until February, 1929, under the direction of Manuel B. Cossio, later professor of pedagogy in the University of Madrid, have effected fundamental pedagogic reforms involving the teacher, the school building, the methods of teaching the various disciplines and of maintaining contacts between the schools and their graduates and the graduates' families. The museum's investigations range from the study of the teaching problems in foreign countries or of some individual concrete subject to a survey of the condition of schools in Spain. Its publications are distributed free of charge.

But it was after 1898, after the campaign of Costa y Martínez in his *Reconstitución y europeización de España* (Madrid 1900) and after the appearance of such of Giner's works as the *Problemas urgentes de nuestra educación nacional*, that the country's reaction really set in. In the first years of this century (1903-04), the state founded the Instituto de Reformas Sociales for the purpose of investigating social problems. It was self-governing under a board of directors, and was divided into sections of which the prin-

cipal ones were those for industrial technology, statistics, economics and legislation. There Christian democrats like Sanz y Escartin and Burgos Mazo collaborated in the same enterprise with Azcarate, Buylla and Posada, who might be called socialists of the chair, and soon even Marxian socialists joined the governing board. The institute made various studies of the problems confronting Spain, as a means of showing the application of their doctrines to objective situations. A monthly organ, *Boletín del instituto de reformas sociales* (1904-24), published the results of this work and additional monographs by specialists on such subjects as strikes, agricultural questions and labor contracts. In 1924 the institute lost its autonomous character and was incorporated in the labor ministry as a labor council. From its ashes and through the influence of one of its best specialists, Leopoldo Palacios, arose the Escuela Social, organized by the ministry itself. Its classes are attended chiefly by especially qualified workers, employers and ministry employees; its curriculum includes cultural history, social economics, industrial legislation, law, industrial technology and economic and human geography, in addition to modern languages and stenography. The labor ministry publishes the *Revista de política social* which deals not only with departmental activities but also with theoretical problems. The General Statistical Bureau under this same ministry publishes the *Boletín de estadística* (1918-) and the *Anuario* (1858-) furnishing statistical data on the economic and social life of the country.

The Instituto Nacional de Previsión, which was organized as a branch of the institute mentioned above, also independent of the labor ministry, deals with all problems relating to the establishment and administration of social insurance schemes. For instance, it has recently assisted in preparing a program of maternity insurance. Research in the institute is carried on by engineers, practical technicians and university professors; the administrative personnel is given special training at the institute. The Universidad Industrial of Barcelona also deserves mention in this connection, although it concentrates on the practical application of the results of its scientific research.

Investigations in the newer social sciences are conducted by members of the professorial ranks in centers that owe their origin, for the most part, to the Junta para Ampliación de Estudios é Investigaciones Científicas, founded by the state in 1907. This institution is the sig-

nificant instrument of reform in Spanish cultural life. It is autonomous, and sends students and professors to foreign countries in order to form international contacts. Upon their return they organize in groups called "research centers." In the research center which has been established by the historians and jurists, the new aspects of social history are receiving attention. This emphasis had previously appeared in such works as the *Historia de las instituciones sociales de la España goda* (4 vols., Valencia 1896) by E. Pérez Pujol; *El colectivismo agrario en España* (Madrid 1897) by J. Costa y Martínez; *El régimen señorial y la cuestión agraria en Cataluña durante la edad media* (Madrid 1906) and the valuable study *El elemento germánico en el derecho español* (Madrid 1915) by E. de Hinojosa de Naveros; *La enseñanza de la historia* (2nd ed. Madrid 1895) and the *Historia de España y de la civilización española* (4 vols., Barcelona 1900-11) by R. Altamira y Crevea, the only living member of this reform group. The group of historians and jurists who work within this institution publish the *Anales para la historia del derecho español*. The title gives an imperfect idea of the contents, for it includes profound studies on the history of Spanish economics and on social and legal institutions. Assiduous contributors to those annals are Sánchez Albornoz, Carando, Díez Canseco and Ots Capdequi, already real masters in their own fields. Unfortunately the Arabists have no organ in which to publish the results of their research on Hispanic-Arabic culture and there is no index to their writings. However, a useful bibliography accompanies the recent book by Professor C. A. González Palencia, *Historia de la España musulmana* (Barcelona 1925). The most significant contributions to the study of Hispanic-Arabic culture are the studies on the administration of justice and of teaching under the caliphate by Ribera Tarrago, the writings of M. Asín Palacios on the history of the Mussulmanic religions, and the work of Lafuente Alcántara, González Palencia and García Gómez on related topics.

Work in the anthropological and related sciences is being done in the Centro de Estudios Históricos of Madrid and at the Institut d'Estudios Cataláns of Barcelona. Palaeontologists and ethnologists jointly are publishing the newest works on Spanish prehistory. The archaeologists such as Professors Obermaier, Hernandez Pacheco and Gomez Moreno are making valuable contributions by the study of art as a social

phenomenon and as the expression of the cultural situation. The philologists under the great master Ramón Menéndez Pidal are making distinguished contributions to Romanic culture, throwing light on literary myths and analyzing the influences playing on the formation and degeneration of a language. In this group Professors Onís, Americo Castro, Navarro Tomas and Damaso Alonso are important.

Economics has been cultivated by writers like Borrego and professors like Conte, Colmeiro and Piernas Hurtado. The writings of Antonio Flores de Lemus, professor at the University of Madrid, symbolize the change which the study of economics has undergone by incorporating mathematical statistics. His works on the tariff, his unsigned essay on the abolition of consumption taxes in Spain, the plan for local taxation which he elaborated and published and which became the basis of the laws that reconstituted the local treasuries, another unsigned treatise, *Dirección general de contribuciones*, on administrative defects in tax collection, make him the recognized authority in these disciplines. His position as technical assessor in the ministry of finance converts that office into a real research center which is frequented by students and professors studying methodological problems in economics, mathematical statistics and finance. At present Flores de Lemus, assisted by his pupil Professor Viñuales has—at the government's request—proposed a plan for putting the Spanish currency on the gold standard basis. The Spanish banking association is already under the technical direction of an eminent Spanish economist, Bernis, formerly professor of the University of Salamanca, and author of many valuable works.

Political science is the object of special attention in non-university circles. The Escuela de Criminología, an official institution founded at almost the same time as the Junta de Ampliación de Estudios, has as its principal purpose the training of personnel for the handling of prisoners. The subjects to which it devotes particular attention are criminal sociology, corrective pedagogy, anthropology and physiological psychology. This institution was headed until his recent death by the penologist Rafael Salillas, author of *El delincuente español* (2 vols., Madrid 1896-98). International affairs have become a subject of study by organizations such as the Asociación para el Estudio del Derecho Internacional, the Asociación Francisco de Vitoria and the Seminario de Estudios

Internacionales, which has begun to publish a *Boletín de información internacional*. The schools of engineering and architecture are manifesting great interest in economics, contributing to the solution of the problems of scientific management. The Centro de Orientación Profesional, recently established by the state, is also studying questions of personnel management.

In Portugal the position of the social sciences in the universities is similar to that in Spain. The curriculum of the law faculties is with slight variations the same as in Spain and thus includes among other subjects economics, political science, finance and commercial law. In 1902 the University of Coimbra was reorganized and a chair of sociology established. However, the revolution that overthrew the monarchy did not expand the scope of the social sciences. But Portugal has had eminent historians and sociologists such as the great Herculano, an

extraordinary mediaeval scholar who continues to exercise great influence, and Gama Barros, historian of administration in the Middle Ages and himself an innovator in this field in our own day. The greatest historian and sociologist on the peninsula is the Portuguese, J. P. Oliveira Martins, whose *Historia da civilização iberica* (Lisbon 1879) is being continually reprinted in Portuguese and Spanish. Oliveira's anthropological works, *Quadro das instituições primitivas* (2nd ed. Lisbon 1893) and the *Systema dos mythos religiosos* (Lisbon 1882), are both of the highest order. In 1919 a decree was promulgated establishing the Instituto de Seguros Sociales which, like its counterpart in Spain, was to stimulate scientific investigation, but it has not begun to function. At present the younger scholars, whose organ is the review *Sara nova*, are taking a lively interest in the problems of social science.

FERNANDO DE LOS RIOS

IX

Latin America

The twenty Latin American republics conform essentially to the same cultural pattern in the matter of the social disciplines and may be considered together. Individual differences, due to variations in cultural development or in local needs, will be noted. The development of the social sciences in Latin America falls into three well marked periods.

I. THE COLONIAL PERIOD. The first generation of the Spanish conquest was devoted to the economic and religious exploitation of the Indians by the conquistadores, the priests and brotherhoods. As a consequence no literature of note was produced in the first generation by the invaders, and the already fairly well developed literatures of Mexico, Yucatan and Peru were practically destroyed. One priest and pacifier, Landa, boasted of having destroyed twenty-seven Maya manuscripts at one burning. The succeeding generations, however, brought forth several types of literature dealing with social subjects. Some of the more liberal spirits attempted to recover what they could of the rapidly vanishing indigenous civilizations. Fernando de Alva Ixtlilxochitl, a mestizo, descendant of the ancient kings of Texcuco, was able to make the largest contribution to this work because of his knowledge of the Indian tongues and his access to the confidence of the surviving literati. He translated some of the old manuscripts which had escaped the priestly ravages, due to the fear of the magic that both Indian and Spaniard supposed them to contain, and he also wrote several historical and anthropo-archaeological treatises on the indigenes. The best of these was *La historia chichimeca*. Many of the clergy and conquerors also included much material of an archaeological character in their early historical narratives.

These historical works fall into two classes: those written by the Spanish adventurers in their old age, recounting the exploits of the conquest, and more formal histories produced usually by the clergy with the intention of giving to Europeans and Americans comprehensive accounts of the history of the new

world, or portions of it, in as much detail as was possible from the limited resources at their disposal. Perhaps among the best known of the former class were the *Historia verdadera de la conquista de la Nueva España* (Madrid 1632) of Bernal Díaz del Castillo (died 1560) and Juan de Castellanos' *Historia del nuevo reino de Granada* and *Elegías de varones ilustres de Indias* (Madrid 1589). Histories of the second type were relatively numerous and they were more definitely a Latin American product. These histories began to appear by the middle of the sixteenth century and continued throughout the colonial period. The more important of these works naturally appeared in the older portions of Latin America, some of them being printed in America and others in Spain. Among these early histories dealing with Mexico or New Spain were Fray Toribio de Motolinia's (died 1569) *Historia de los indios de Nueva España* (about 1536-41), generally regarded as the best review of the work of the conquerors and missionaries in Mexico, and Juan de Torquemada's *Monarquía indiana* (Seville 1615), a general account of political and ecclesiastical affairs in Mexico in the sixteenth century drawn in part from the preceding author and from Mendieta. To these should be added Bartolomé de las Casas' (1474-1566) *Brevísima relación de la destrucción de las Indias* (Seville 1552), and two large manuscript works, including an *Apologética historia sumaria quanto á las calidades, disposición, descripción, cielo y suelo de estas tierras; y condiciones naturales, políticas, repúblicas, maneras de vivir y costumbres de estas gentes de las Indias occidentales y meridionales, cuyo imperio soberano pertenece á los reyes de Castilla*, written to prove that the Indians were not savages before the coming of the Spaniards and therefore without civil and moral rights according to the contemporaneous theories of the rights of savages, and a large three volume manuscript *Historia general de las Indias*, covering the period between 1492 and 1520. These works are among the greatest fulminations against greed and injustice in the service of power of all times. Antonio de Her-

rera y Tordesillas' *Historia general* (8 vols., Madrid 1601) is one of the best sources for Indian life and customs. Fray Agustín de Betancurt's (1620-1700) *Teatro mexicano, Descripción breve de los sucesos ejemplares, históricos, políticos, militares y religiosos* (4 vols., Mexico 1697-98), *Cronografía sacra* (Mexico 1696) and *Tratado de la ciudad de México*, and Jerónimo Mendieta's (1525-1604) *Historia eclesiástica indiana* (ms. 1596, published Mexico 1870), which laid bare the crimes, vices and oppressions of the conquerors, are other standard historical and archaeological works of the period. Quito (Ecuador), which occupied a position of marked importance in Spanish colonial culture, produced some important works, including Diego Rodríguez de Ocampo's *Relación de lo que era el reino de Quito al tiempo de la conquista y de su estado presente*; Miguel Uriarte y Herrera's *Representación sobre los adelantamientos de Quito y la opulencia de España* (1757); Juan de Velasco's *Historia del reino de Quito* (1789); and Jacinto Callahuazo's *Las guerras civiles del Inca Atahualpa*, which served as basis for the preceding work.

The historical treatises produced in Peru and in Chile (which in colonial times was a part of Peru) have been numerous. Some of the most important of these works were Cristóbal de Molina's *Conquista y población del Perú* (written about 1552); Alonso de Góngora y Marjaiejo's *Historia del reino de Chile*; Alonso de Ovalle's (born 1601) *Histórica relación del reino de Chile* (Rome 1646), still an important authority; Diego de Rosales' (1605-77) *Historia general del reino de Chile* (3 vols., ms. until 1878), important for its archaeological materials, and his *Conquista espiritual del Chile*; and Miguel de Olivares' (born 1674) *Historia de la compañía de Jesús en Chile* (Santiago 1861) and *Historia militar, civil y sagrada del reino de Chile* (2 vols., begun 1736 and published Santiago 1864-1901). Two noteworthy early Peruvian historians were Pedro Cieza de León (1518-60), who wrote *Crónicas históricas del Perú y de las guerras civiles* (pt. i, Seville 1553, pt. ii, 1873) and Garcilaso de la Vega (born 1539), a mestizo, who produced *Comentarios reales*, one of the ablest books on the Indians and early Spanish events. Four early Cuban histories may be mentioned, the *Teatro histórico, jurídico, político, militar de la isla Fernandina de Cuba* (ms. 1791, Havana 1876) by Ignacio José de Urrutia (born 1730), *Historia de la isla de Cuba y en especial de la Habana* (1811) by Antonio José Valdés

(born 1752), *Relación de lo espiritual y temporal del obispado de Cuba* by Fray Alonso Enríquez de Armendáriz, and *Llave del nuevo mundo y antemural de las Indias occidentales* (ms. 1761, Havana 1830-31) by José Martín Arrate (born 1697). The works cited above represent only a few of the many histories written in the colonial period, but they will serve to indicate the types of subjects treated and the character of the writing. Composed principally by the clergy, they divide their attention primarily among the curious heathen customs of the savages, the devout labors of the missionaries, and the remarkable secular events of the country, with varying degrees of approval of the deeds of the conquerors. These narratives do not differ markedly, except perhaps in their greater number, piety, and propagandistic spirit, from those of our own colonial period.

These colonial writers were also keenly interested in geography, since nature was not always easy to deal with in tropical America and distances were great. Pedro Vicente Maldonado's (1709-48) *Mapa del reino de Quito* (Paris 1747) and *Relación del camino de Esmeraldas* and Juan Romualdo Navarro y Montesín's *Descripción geográfica, política y civil del obispado de Quito* are typical examples from colonial Ecuador.

Since practically all of the teachers in the colonial universities were priests or members of religious orders it is not surprising that there was a large theological output, taking the place to a considerable extent of what became the social sciences in the nineteenth century. Three Jesuits—José de Acosta (born 1539), Blas Valera and Alfonso de Barzena (1528-78)—published the first book to be printed in Peru, *Doctrina cristiana* (1584). This book was translated into several Indian languages for missionary purposes. Acosta also wrote a *Historia natural y moral de las Indias* (1591) and *Fasti novi orbis de procuranda indorum salute* (Salamanca 1588). Ecuador, always noted for the theological spirit of its culture, is represented by Juan Bautista Aguirre's *Tratado polémico-dogmático*, Isidoro Gallegos' *Actibus humanis* (1677), *Perfectionibus Christi*, and *Curso de filosofía*, Antonio Ramón de Moncada's *Usus et abusus scientiae mediae*, Alonso Peñafiel's *Philosophia universa* (León 1653) and *Obligaciones y excelencia de las tres órdenes militares, Santiago, Calatrava, y Alcántara* (Madrid 1643), Baltasar Pinto's *Phylosophia* (ms.) and *Animástica* (ms.), and Francisco Rodríguez

Fernández' *Segundo pecado original del paraíso de las Indias* and *Colección de sermones*. To the above should be added various social, juristic and theological treatises of Bartolomé de las Casas, written in the sixteenth century in defense of the Indians, but of universal scope as far as fundamental principles are concerned, including *Tratado comprobatorio del imperio soberano y principado universal que los reyes de Castilla y León tienen sobre las Indias* (Seville 1553), *Tratado sobre la materia de los indios que se han hecho en ellos esclavos* (Seville 1552), *Avisos y reglas para los confesores q. oyeren confesiones de los Españoles que son, ó han sido en cargo á los indios de las Indias del mar oceano* (Seville 1552), and a voluminous unpublished work, *Sobre socorrer y fomentar los indios*.

The social sciences in the restricted sense had their development primarily through the universities. The very high culture of colonial Latin America is attested by the early establishment of her numerous universities, always under the patronage of the clergy and the king. The most famous of these, with the dates of their establishment, are as follows: The University of San Marcos (Lima, Peru), 1551; Mexico, 1553; Santo Domingo, 1558; Colombia (New Granada), 1572; Córdoba (Argentina), 1614; Chuquisaca or Charcas (Bolivia), 1623; Havana (Cuba), 1728; Santiago de Chile, 1747; Quito (Ecuador), 1787; and Buenos Aires, 1821 (with predecessors going back to 1763). All of these and various other universities taught one or more phases of the law and theology, including natural law and moral philosophy, which were in Latin America as in British America the true forerunners of the social sciences proper. In the ancient University of Mexico the chairs were, from its foundation, theology, sacred Scriptures (Bible), canon or ecclesiastical law, civil law, institutions and laws, arts, rhetoric and grammar. Some years later medicine and languages (including the Mexican) were added. In the University of San Marcos (Peru) in 1576 the chairs included, with the number of courses to each subject, grammar (two), native languages (one), theology (three), laws (three), canon law (two) and medicine (two). Part of the requirement for a degree from this institution was at that time to swear to defend the mystery of the immaculate conception. In 1770 the University of San Marcos was somewhat liberalized under the enlightened reign of Carlos III of Spain, but it was not until 1861 that it became a modern university. The

other universities were organized in a manner similar to those of Mexico and Peru. They had been founded by the clergy primarily to train churchmen, particularly missionaries, and secondly to prepare men to administer the affairs of state. Most of the important government officials were, however, chosen from pure-bred Spaniards and sent out from Spain, having been previously trained at Salamanca, if they were trained at all in a university.

In the sixteenth century Spanish learning was a tradition, but in the seventeenth and eighteenth centuries, with the decline of Spain, the University of Salamanca and her American imitators became extremely conservative. This new spirit was felt particularly in law and theology. Spanish law practically ceased to be taught in the universities and the growing classicism and conservatism limited law instruction almost wholly to civil (Roman) and canon law. Also the clerical teachers in the Spanish-American universities did what they could to prevent the influx of the new ideas from Europe which began to appear about the middle of the eighteenth century. In 1767 Carlos III expelled the Jesuits from his dominions, including the American colonies, and the growing trade due to the rising commercial revolution brought in new ideas as well as more widely distributed commercial prosperity toward the end of the eighteenth century. The universities now came under the control of more liberal religious orders and the direction of the Spanish viceroys, who, like Vertiz at Buenos Aires and Juan Vicente de Guemes Pacheco de Padilla of Mexico, were sometimes enlightened and liberal men. Under these circumstances some of the old universities expanded their curricula to include all three forms of private law (Roman, canon and Spanish), and especially to add the law of nature and nations, which in reality consisted of public law and political and social philosophy. It was the same sort of intellectual and university movement that was being developed at the same time and somewhat earlier, on a larger scale, in English North America by Franklin, Washington, Jefferson and others. One of these universities, Charcas or Chuquisaca, in Alto Peru (Bolivia) developed (largely clandestinely and in spite of the Inquisition) so far in these new directions that it became the political training center for the future leaders of the revolution in the southern half of the continent. Some of the northern universities, particularly in Venezuela, were also

carrying on a similar work. Then as now new and liberal doctrines found a congenial atmosphere in which to multiply and spread in the universities, although the teachers did not themselves openly, or perhaps even tacitly, espouse them.

The social science publications of this period were not numerous and were naturally largely colored by theology. Antonio López de Pinedo of Peru was the first of that country to achieve an international reputation in law. He made a collection of the laws of the Indies and wrote *Bulario indico*, dealing with the spiritual and ecclesiastical government of America. Gaspar de Escalona y Aguero of Alto Peru (Bolivia) wrote *Gazofilacio regio peruvico* (Madrid 1647), a treatise on finance and administration celebrated in its time, and *Oficio del virrey*. Bishop Gaspar de Villaroel (born about 1587) of Ecuador became very famous for his *Tratado del gobierno eclesiástico* (1656). Another Ecuadorian writer, less well received at home, was Francisco Javier Santa Cruz y Espejo (born 1750). His writings on political and theological questions, especially his *Nuevo Luciano de Quito* (1779) and *Cartas riobambenses* (1788), as well as his periodical *Primicias de la cultura de Quito*, caused his exile to Bogotá, where he helped start the revolution of 1809. Most of the writings of this time were, however, perfectly safe. Another radical, Toribio Rodríguez de Mendoza of Peru, sometime rector of San Carlos, introduced toward the end of the eighteenth century the theories of Newton, Descartes, Bacon and Gassendi, and created chairs in the law of nature and nations and adopted the civil doctrines of Helvétius. Other Peruvian partisans of the new spirit in the social and legal philosophy of this time were Mariano Vivero, who taught the law of nature and made Spanish law independent of Roman law, Diego de Cisneros, Simón Cerdán and Vicente Morales, who became president of the court of Cadiz.

At the northern end of the continent of South America, in New Granada (Colombia) and in Venezuela, the reform movement in the social studies and in politics toward the close of the eighteenth century was perhaps strongest. In the former country Antonio Nariño (1765-1823) made a study of the United States government and organized a liberal group to study the French radicals. He translated the *Rights of Man* in 1794 and edited *La bagatela*, an advanced political magazine. He was imprisoned and sent to Spain, but escaped. The

revolution having failed temporarily, he went to England in 1820, where he studied political theory, especially that of Destutt de Tracy. In 1821 he was back in Colombia and was made senator. Francisco Antonio Zea (1770-1822), also sent to Spain for circulating the *Rights of Man*, edited the *Correo del Orinoco* (1818-21), a medium for advanced political discussion, and was called the Franklin of his country. Camilo Torres (1766-1816), another reader of forbidden books, wrote on colonial government, was professor of civil law in the university and the leading jurist of the country. José Vargas (born 1786), a Venezuelan, translated the *Social Contract* in 1809. This book was thereupon widely distributed throughout Latin America, being republished in Buenos Aires and elsewhere. Miguel José Sans (born 1754) founded in 1790 the Colegio de Abogados (Law College) of Caracas and initiated the teaching of civil law in the country. Juan Germán Roscio (born 1769), of Caracas, was largely responsible for the Venezuelan manifesto, or declaration of independence. His *Triunfo de la libertad sobre el despotismo* (Philadelphia 1817) combatted the Spanish system. To these names should also be added that of Antonio José de Irisarri of Guatemala (1786-1868), who belongs in spirit to this period, although of a somewhat later date. He was a revolutionary political writer of some solidity, publishing *El semanario republicano de Chile* (1813) and *El duende de Santiago* (1818). He completed his education in London in 1820, where he published *El censor americano*. In the same class belongs Louis Fernando Vivero (died 1842), who promoted the revolution in Guayaquil and was the author of *Lecciones de política*.

II. THE NINETEENTH CENTURY. This period falls into two subdivisions, each occupying about half a century. These are the periods of revolution and reaction and of reconstruction. The revolution began at both ends of the continent—in Buenos Aires and in Venezuela—in 1810, under the leadership of Belgrano, Moreno and San Martín on the one hand, and of Bolívar and other men just mentioned on the other hand. These men had been educated in the new political philosophy and they seized upon the favorable circumstances of the conquest of Spain by Napoleon to strike for political independence. Although they were men equal in political theory and outlook to our own revolutionary leaders, such as Franklin, Washington,

Jefferson, Adams and Madison, whom they frequently emulated, they had a much more difficult task to perform. The masses of their followers were mestizos, without the barest rudiments of instruction, grossly superstitious and almost brutal in their interests and habits, taught to depend for absolute dictation and direction upon a hierarchical church and large landholders of an entirely different culture and social and political outlook. The Spanish system had created this division of classes to safeguard its dominance. The new republican order now had to make headway against this social dualism at home as well as against foreign domination. This is the explanation of that half a century and more of defeated ideals of the great patriotic statesmen and of anarchy and revolution so vividly described by Sarmiento (1811-88) in his *Facundo; o civilización i barbarie en las pampas argentinas* (Santiago de Chile 1845) and *Conflicto y armonías de las razas en América* (Buenos Aires 1883). The struggle for intelligent self-government and against landed autocracy and privilege still continues in those countries where large numbers of native races have not yet been educated, as in Mexico and Venezuela.

It is significant of the changing balance of power in Latin America during the eighteenth and nineteenth centuries that the revolution sanctioned by the new political philosophy developed most effectively in the Rio de la Plata area, centering in Buenos Aires, the last of the great coastal regions to come under the Spanish type of civilization. In Brazil the revolution came much more normally, at first under the leadership of one of the princes of the house of Braganza, with a peaceful transition to local rule later. After the death of Mariano Moreno, the Rousseauian political philosopher of the revolution, in 1811, and following a period of shifting and uncertainty, Rivadavia came to the helm in 1821. Rivadavia was so like Jefferson in his basic political philosophy, although much less of an advocate of decentralization, that it should be noted that he spent the years 1816-21 in Europe, and especially in France and England, where he came into intimate contact with the liberal thinkers of the time, including Bentham and the elder Mill. He brought back with him the theories of these men as well as those in which Destutt de Tracy, Jefferson's friend, had restated the philosophy of the French political revolution and enlightenment. One of the first things Rivadavia did in

Argentina was to establish the University of Buenos Aires (1821), in which he had James Mill's *Elements of Political Economy* and Bentham's theories of law and of government taught as the foundation principles by which he hoped to reconstruct the social philosophy of Spanish America. In less degree, and less consciously and less articulately in some cases, the same sort of movement for the reconstruction of the political theory basic to the revolution was going on in all Latin America. Although political economy was only secondary, Rivadavia had a lively appreciation of the fiscal needs of his country, and he had political economy taught in both its applied and theoretical aspects in the University of Buenos Aires as early as 1823. Under the leadership of Dean Gregorio Funes (1749-1830) something of this new outlook was creeping into the old conservative University of Córdoba, and like changes of viewpoint were being effected in the universities in Peru, Colombia, Venezuela and Mexico. It was at this time that the social sciences as such entered into the Latin American universities, at about the same time as, or a little later than, the establishment of chairs in these subjects in the colleges and universities of the United States.

But academic instruction in the social sciences could not save the revolution in Latin America. The uneducated, superstitious and unsocialized masses were too numerous in contrast to the few enlightened leaders. It was easy enough to control the masses, but it was just as easy, if not more so, for the self-seeking and relatively unenlightened leaders to control and direct them with motives of plunder as for the public spirited and educated leaders to direct them toward the support of civic ideals. Consequently, Rivadavia and San Martín went into exile before 1830, the better type of leaders in all countries were retired from power, frequently executed or exiled, and men like the bloody Rosas of Argentina, the conservative self-seeking Santa Anna of Mexico, or the autocratic Dr. Francia of Paraguay, came into power on the shoulders of the ignorant, turbulent masses. This period of reaction lasted until about the middle of the century—1852 in Argentina and 1857 in Mexico—or longer, according to the cultural development of the countries. In this period the universities were reduced to shadows and in Mexico actually abolished. The tyrants suppressed the teaching of the social sciences and historical and political

writings almost ceased to appear, except in the less turbulent states of the west coast, as will soon appear from citations of the writings of the time.

In Latin America there is a closer connection between government and the social sciences than in this country. Teaching the social sciences in the universities is incidental or secondary to the pursuit of governmental service or the legal profession. There are few if any full time professorships in the social sciences. The professor of the subject ordinarily has a single course or occasionally two or three courses in various social sciences, while his income is derived primarily from his law practise or from some governmental position. This arrangement comes down from colonial times when the clergy taught one or more courses largely incidentally, and it has been continued because there are not public funds available for the creation of large departments in the social sciences, outside of law. Even in law the different specialties are usually divided into single courses among several professional men. Throughout the nineteenth century the various social sciences, excepting law, were limited to one or two courses, and these were taught along with law in a faculty or school called variously juristic science or jurisprudence, law or law and the social sciences. The practise of law, which, as in North America, was not popular before the middle of the eighteenth century, became the leading profession at the time of the revolution and after. The other great profession, the clerical, then fell into relative disfavor and throughout most of the nineteenth century the profession of the priest was ordinarily shunned by the best minds, because the church had usually been on the side of Spain and the conservative and undemocratic leaders and tyrants in the period of struggle for self-government.

It is also important to note that the chief interest of the law profession throughout most of the nineteenth century was in public rather than in private law. This fact, so different from what we know to have been the case in the United States, was due to a number of circumstances. In the first place the harder struggle of the Latin Americans for self-government compelled greater interest in public law and the philosophy of law, just as in North America in the years immediately following our own revolution. At that time in our history and throughout most of the nineteenth century in

Latin America there was a very strong interest in the philosophy of law and government as well as in specific legal rules. The subject of natural law, as well as that of canon law, was taught almost until 1900 in Latin American secular universities. Another reason for their great concern with public law is the fact that their legal heritage is from the Roman law, while ours is from the common law of England. Their law has for centuries been reduced to codes and principles and thus their legal system is a quasi-governmental system closely allied to their political and ecclesiastical principles and institutions. Court procedure is more like governmental or administrative procedure and their codes are similar to their constitutions, while our municipal and constitutional law belong to two very different categories. Their constitutions are simply great political codes, but somewhat less systematic and logically authoritative than their civil codes, although both are applied in actual practise in essentially the same way, i.e., by deduction from general principles.

Consequently, the Latin Americans have not in the past made any marked distinction between their law and the social sciences. For both they ordinarily use the same generic term—primarily ethical in significance—*derecho*, or right, in contrast to the more formal term, *ley*, or formal rule of action. Thus they speak of *derecho público*, *derecho político*, *derecho económico*, *derecho civil*, *derecho criminal*, etc. to cover such meaning as public (including constitutional), political, economic, civil and criminal law or right and policy. Furthermore, as has been intimated, their law schools have not been mere professionalized vocational schools, but have been schools of social science designed for the purpose of training governmental officials quite as much as private practitioners. There the students have pursued the subjects of government (*derecho público* and *político*), political economy (economics in our business sense is more recent with them) and sociology (which grew largely out of the old *derecho natural*), together with their *derecho civil*, *derecho comercial* and *derecho criminal*. Their constitutions are therefore in their minds in large degree political treatises, ordinarily formulated by their most learned professors of political science or *derecho político* and *derecho público*. Likewise their international treaties and documents, such as the Drago doctrine, have been produced by professors of *derecho público*.

internacional and *político*, who were also employees of the state, possibly ministers of foreign relations or secretaries of state. In all Latin American countries the various forms of their private law (never as completely private or individualistic as ours) are, like their constitutions or public law, codified and fall into such divisions as civil, criminal, commercial, rural, mining and procedural codes. This codification began soon after the revolutions and has continued to the present day. It has a greater definiteness and certainty than our private law, is largely in the category of public law and saves much time, energy and expense in avoiding intricate technical trials in the courts.

Following the reestablishment and strengthening of the constitutional regimes after the middle of the century, the universities revived and began to pay more attention to the social sciences. By the end of the century canon law had practically disappeared from the curricula of the more progressive secular universities, which included all the old universities named above and the new national universities established, especially after 1860. Classical economics began to give way to a new and liberal functional economics by 1900, but in few institutions was more than one course taught; this might run throughout the year, and be followed the next year by a course in applied economics, which usually dealt especially with money, banking and public finance. International law, sometimes a double course (public and private), was taught in most of the universities in the latter half of the century and sometimes earlier. The courses in natural law began to be transformed into the philosophy of law early in the eighties. By the nineties the philosophy of law had split into two general types of courses, which tended in the direction of institutional history and general jurisprudence on the one hand, and of sociology and anthropology on the other hand, corresponding closely in each case to courses under these names given in our own universities and colleges at that time or a little earlier.

Perhaps the first course specifically called sociology in Latin America was given about 1900 by Dr. Ernesto Quesada of the University of Buenos Aires, although courses in the philosophy of law containing sections entitled sociology had been taught in the University of Buenos Aires by Antonio Dellepiane in the middle nineties, and possibly earlier in other universities. Although the Latin Americans

have been somewhat slow to change the names or increase the number of their courses in the social sciences, the content has been much the same as in other countries. Even in history, which had been taught throughout the nineteenth century in Latin America in some form or other, few universities offered more than two or three courses at the end of the century; these consisted usually of ancient, modern and the national history. Sometimes the division was merely between national and European or general history. The history of institutions sometimes appeared as a separate course, but it was perhaps more often taught in connection with the philosophy of law and the several forms of law—civil, political, international, criminal, etc.

The nineteenth century in Latin America, particularly toward its close, was reminiscent. There was a serious stock taking, an attempt to explain historically the character of the civilizations which had developed. Only a few of the vast number of these histories can be mentioned to illustrate this increased activity in history writing which came with the establishment of relatively stable governments and the renaissance of the universities. In Mexico Lucas Alamán's (1797-1853) *Historia de Méjico desde 1808* (5 vols., Mexico 1843-52), and *Disertaciones sobre la historia de la República Mejicana* (3 vols., Mexico 1844-52) illustrate the more critical methods. Alamán also organized the general archives of Mexico and established the Museum of Antiquities and Natural History. He was a member of the Massachusetts Historical Society and the Philosophical Society of Philadelphia. Manuel Orozco y Berra's (1816-81) *Historia antigua y de la conquista de Méjico* (5 vols., Mexico 1880) is a review of early Mexican life and institutions. Orozco was one of several Mexican historians who were stimulated by Prescott's work on Aztec civilization. José M. Maroqui's *La ciudad de Méjico* (1900) is the work of an archaeologist reconstructing the history of the city, while Antonio García Cubas' *El libro de mis recuerdos* (Mexico 1905) tells the story of the American invasion and the Maximilian episode. Among many other Mexican historians of this period should also be mentioned Joaquín García Icazbalceta (1825-94), Francisco Pimentel and Agustín Rivera, who reviewed interestingly the history of colonial times. García Icazbalceta, besides translating Prescott's *History of the Conquest of Peru*, brought about the publication of many manu-

scripts of colonial historical writers. In 1858-66 his *Colección de documentos para la historia de México* appeared in two volumes; in 1866 his *Apuntes para un catálogo de escritores en lenguas indígenas de América*; in 1886 the famous *Bibliografía mexicana del siglo XVI*; and in 1886-91 the *Nueva colección de documentos para la historia de México*, in five volumes.

Peruvian historians especially have been active since the revolution. In the latter part of the century we find such productions as Manuel de Mendiburu's *Diccionario histórico y biográfico del Perú* (Lima 1874-86), a treasure house of early data in eight volumes, Pedro Paz Soldán's *Diccionario de peruanismos* (Lima 1882), Mariano Felipe Paz Soldán's (1821-86) able histories of the independence and its aftermath in Peru and of the War of the Pacific (*Historia del Perú independiente*, 2 vols., Lima 1868-70; *Narración histórica de la guerra de Chile contra el Perú y Bolivia*, Buenos Aires 1884), and Sebastián Lorente's *Historia del Perú* (6 vols., Lima 1860-76), and his valuable *Historia de la civilización del Perú*. Also Félix Cipriano Zegarra's literary history of Peru should not be omitted. In the documentary field Manuel A. Fuentes (born 1828) published *Memorias de los virreyes* (Lima 1859) in six volumes and *Historia sagrada*, while Ricardo Aranda edited *Tratados diplomáticos y actos internacionales y políticos del Perú* (14 vols., Lima 1890-1911). Other important documentary collections are E. Larabure y Unanue's *Monografías histórico-americanas* (Lima 1893) and Manuel de Odrizola's *Documentos históricos del Perú* (5 vols., Lima 1863-77).

In Chile Juan Ignacio Molina's (1737-1829) *Compendio de la historia geográfica, natural y civil del reino de Chile* (2 vols., Madrid 1788-95) is an example of the earlier historical writing before independence. Claudio Gay (1800-72) wrote a *Historia física y política de Chile* to 1830 (26 vols., Paris and Santiago 1844-54). Late nineteenth century historical writing in Chile is represented by the *Historia general de Chile* (Santiago 1884-1902) in sixteen volumes, coming down to 1833, and the *Un decenio de la historia de Chile*, in two volumes, covering the years 1841-51 (Santiago 1905-06), both by Diego Barros Arana (1830-1907); by the history of the organization of Peru, 1831-41, by Ramón Sotomayor Valdés (1830-1904); by the numerous histories of periods and movements in Chile by Benjamín Vicuña Mackenna (1831-86); and by similar writings of Miguel Luis Amunátegui

(1828-87) and the later historians, José Toribio Medina, Crecente Errázuriz (born 1839) and Gonzalo Bulnes (born 1851). Medina and Errázuriz wrote on colonial history, the latter producing *Los orígenes de la iglesia chilena* (Santiago 1873), as well as histories of the conquest and growth of Peru. In Bolivia Ramón Muñoz Cabrera (1819-69) wrote *La guerra de quince años en el Alto Perú*, and *Vida y escritos de Bernardo Monteagudo*. Jorge Mallo wrote on the administration of Sucre, Jenaro Sanpués on other important administrations; Modesto Omiste wrote *Crónicas potosinas* (4 vols., Potosí 1893-96) and other works; J. V. Ochoa and Eufonio Viscarra wrote on the War of the Pacific. The last named was also the author of a history of Cochabamba. Noteworthy Colombian historical works of the nineteenth century are Pedro María Ibañez' (born 1854) *Crónicas de Bogotá y del antiguo virreinato* (Bogotá 1891), José Manuel Groot's (1800-78) *Historia eclesiástica y civil de Nueva Granada* (3 vols., Bogotá 1869-70), a most valuable work on early social institutions, José Joaquín Borda's (1835-98) *Historia de la Compañía de Jesús en Nueva Granada* (Paris 1870), and José María Rivas Groot's *Páginas de la historia de Colombia* (1907) in two volumes, dealing largely with constitutional, fiscal and administrative matters. Cuba also was fertile in historical writing in the nineteenth century, producing among other works the *Ensayo histórico de la isla de Cuba* (New York 1842) by Jacobo de la Pezuela, the *Historia de la esclavitud* (3 vols., Paris 1875-77), and *La supresión del tráfico de esclavos en la isla de Cuba* by José Antonio Saco (1797-1879), the *Diccionario biográfico cubano* (New York 1878) by Francisco Calcagno, the *Primeros historiadores de Cuba* (1838) of José Antonio Echeverría (1815-85), *La abolición de la esclavitud* (Madrid 1869), *La cuestión colonial* (Madrid 1869), and *La pérdida de las Américas* (Madrid 1869) by Rafael María de Labra (born 1841), the histories of the cathedral of Cuba and of English interference in America by Pedro Agustín Morell, and finally the seven volume biography of the Cuban hero José Martí by González de Quesada (1900).

Historical writing in Argentina was also voluminous in the nineteenth century. The *Ensayo de la historia civil del Paraguay*, Buenos Aires y Tucumán, in two volumes (Buenos Aires 1816), by Dean Funes long remained the chief historical account of these provinces. The ten volume *Historia de la república argentina* (Bue-

nos Aires 1883-93) by V. F. López (1815-1903) brought the history of that country down to 1852. He was also the author of *Rosas del Perú anteriores a la conquista*, written while in exile in Chile with Mitre, Alberdi and Sarmiento during the tyranny of Rosas. Manuel Bilbao's *Historia de Rosas* (Buenos Aires 1868), Bartolomé Mitre's *Belgrano* (4 vols., Buenos Aires 1858-59), and *San Martín* (4 vols., 2nd ed. Buenos Aires 1890), General José M. Paz' epic *Memorias póstumas* of his campaigns in the revolution, in the civil wars and against Rosas (Buenos Aires 1855), Antonio Zinny's (born 1821) *Historia de los gobernadores de las provincias argentinas* (5 vols., Buenos Aires 1879-83), Mariano Pelliza's (1837-1902) *Dorrego* (Buenos Aires 1878), *Dictadura de Rosas* (Buenos Aires 1894), *Historia argentina desde su origen hasta la organización nacional* (5 vols., Buenos Aires 1888-97), and *Organización nacional*, Vicente G. Quesada's (1830-1913) numerous histories of movements and periods and especially his *Vida intelectual en la América española* (Buenos Aires 1910), Julio Victorica's *Urquiza y Mitre* (Buenos Aires 1906), José Manuel Estrada's *La política liberal bajo la tiranía de Rosas* (Buenos Aires 1873) and his *Historia de la república argentina*, as well as the several important works of Adolfo Saldías (1850-1914) on national evolution in Argentina, will serve to indicate the type and quality of the later nineteenth century historical writing in Argentina. The Brazilian historians were almost as numerous; their works include the classic *Historia geral do Brasil* (vol. i, 1854) and the *Historia das lutas com os Hollandeses no Brasil* (Vienna 1871) by Varnhagen, viscount of Porto Seguro (1816-78), the *Plutarco brasileiro* (Rio de Janeiro 1847), published in English as *Illustrious Men of Brazil* (1858), and the *Historia da fundação do imperio brasileiro* (Rio de Janeiro 1864-68) by João Manoel Pereira da Silva (born 1819), the national history of Joaquim Manoel de Macedo (died 1882), *O Brasil* (1889) of José da Silva Paranhos, baron of Rio Branco, the history of Brazilian poetry and literature by Silvio Romero, and the *Dom João VI* (2 vols., Rio de Janeiro 1908) of the celebrated Manoel de Oliveira Lima. In Uruguay the works of Andrés Bamas (1817-91), in particular his *Artigas, compilación de documentos para la historia del Rio de la Plata* (1849), were notable.

It will be observed from the representative titles here cited that Latin American historical

writing in the nineteenth century centered almost wholly about nationalist themes. Furthermore—a fact that is not indicated so clearly by the titles—these histories are much more philosophic and explanatory, or sociological, than those of the United States or of Europe. The philosophy of history survived late into the nineteenth century, even into the twentieth, in Latin America and has had a strong influence on the historical writing of these countries. There has been an overwhelming impulse to explain as well as to recount. Nowhere else do mere dates and formal facts count for less and nowhere else is the meaning back of the facts of history so eagerly sought. No doubt this emphasis upon explanation has often led Latin American historians into unintentional bias and misinterpretation, but it is not clear that they are more subject to this failing than other historians. One can say with certainty that their histories are ordinarily most interesting reading and from them one can gather some organic notion of the various factors that have been active in their national development.

The Latin Americans have been especially attentive to the subject of geography, since it has been so constant and important a factor in the determination of their national destinies. In addition to the works of colonial times, a few of the chief nineteenth century products in this field may be noted. Manoel Ayres de Casal's *Corografia brasileira* (Rio de Janeiro 1817) attracted the favorable notice of Humboldt. Tranquilino Sandalio de Noda (1808-67) began a *Diccionario geográfico de Cuba* with José María de la Torre, and a fellow countryman of his, Esteban Pichardo y Tapia (1799-1879), composed a *Geografia de la isla de Cuba* (Havana 1854-55), which was generally highly regarded. Carlos de la Torre (born 1858) wrote *La geografia de Cuba*. Colombia produced at least two geographers of note in the nineteenth century, Simón de Laval, author of *Geografia universal* (1814), and Pedro Acevedo, who wrote *Noticia sobre la geografia política de Colombia* (Bogotá 1825). M. Díaz Memos also wrote several popular texts for schools. The Venezuelan, Feliciano Montenegro Colón, published a remarkable political, social and economic geography of Latin America, *Geografia general*, at Caracas (1833-37), in four large volumes. Mariano Felipe Paz Soldán's *Diccionario geográfico estadístico del Perú* (1877) has to do primarily with political geography. A distinguished Bolivian geographer was Ma-

nuel Vicente Ballivián, who produced several works on Bolivian geography between 1887 and 1894. To his name should also be added those of Daniel Campos and José Manuel Pando (1849-1917). Geography, it has been stated, is the most fertile field of Chilean science. Probably the greatest of these productions was the *Geografía política de Chile* (2 vols., Santiago 1888), of Aníbal Echeverría y Reyes. Important also is Francisco Solano Astaburuaga's *Diccionario geográfico de la república de Chile*. In Argentina Estanislao S. Zeballos promoted the organization of a geographical society and himself wrote a record of his explorations under the title *La conquista de quince mil leguas* (Buenos Aires 1878). Since then many geographical works have appeared, including the scholarly *Geografía general de América* by Juan G. Beltrán. In Uruguay, Orestes Araujo published about 1900 a *Diccionario geográfico del Uruguay* (2nd ed. Montevideo 1912), which was concerned largely with social and political geography.

Political economy was rather formal throughout the nineteenth century in Latin America. No general works or texts of distinction were produced, although there were a great many monographs of merit on finance, money, immigration and agriculture. The recurring financial difficulties of the republics stimulated teachers, government officials and publicists to constant attempts at the economic analysis of these practical problems. The relative poverty in general economic theory and in comprehensive special treatises on economic problems was due chiefly to the fact that the incidental character of this subject in the universities prevented any considerable degree of specialization in the field. Even the textbooks in economics were nearly always imported from Europe. After the long vogue of James Mill in the first half of the century, the French economist Courcelle Seneuil, an advocate of the Manchester school, had much influence in Latin America. He was a professor at the University of Chile from 1853 to 1863 and reorganized the Chilean banking system. He was followed at the university by Miguel Cru- chaga (1842-87), who wrote *Elementos de economía política*, *Estudios sobre la organización económica y la hacienda pública de Chile* (2 vols., Santiago 1878-80), and *Tratado elemental de economía política* (2nd ed., Santiago 1870). This last was one of the most notable works of its day in economic theory in Latin America.

Zorobabel Rodríguez, a pupil of Courcelle Seneuil, also continued his point of view. Other Chilean economists were Cristóbal Valdés, Manuel Miguel and Marcial González, author of *Estudios económicos* (1887). In Bolivia Pedro Terrazas' translation of Bastiat's *Harmonies économiques* and Samuel Oropeza's *Economía política* and *Finanzas bolivianas* (Sucre 1887) are also important. In 1891 José María Linare, who edited various economic and financial journals, was made professor of political economy in the law faculty of the University of San Francisco Xavier. Two Colombians, Juan B. Abello (1833-87) and Aníbal Galindo (born 1834), produced treatises on economics, *Lec- ciones de economía política*, and *Estudios económicos y fiscales* (1880) respectively. Rafael Nuñez (1825-94) wrote *La crisis económica* (1886). In Argentina in the nineteenth century there was no work of distinction on political economy after the publication of Juan B. Alberdi's (1810-84) *Sistema económico y rentístico de la confederación* (Valparaíso 1854), published soon after the reestablishment of constitutional government in the fifties. Most of this time the Argentines were content to use a translation of Joseph Garnier's *Eléments d'économie politique*. However, Amancio Alcorta (1805-62) and the historian V. F. López taught political economy very successfully for many years, and in 1890 the latter reorganized the badly shattered finances of the nation. Many good monographs on the fiscal situation also appeared between 1870 and 1900, some of them being prepared by López and Alcorta. In the eighties there was a revival of interest in economic subjects in Mexico. Then were published, all in the City of Mexico, Carlos Pacheco's *Informe sobre colonización y terrenos baldíos* (1885), J. C. Segura and M. D. Cordero's *Reseña sobre el cultivo de algunas plantas industriales* (1884), Santiago Ramírez' *Noticia histórica de la riqueza minera de México* (1884), and Ricardo de María Campos' *La crisis monetaria* (1886) and *Datos mercantiles* (1889). Francisco de Frías' *La cuestión del trabajo agrícola y de la población de la isla de Cuba* (1860) was largely responsible for the beginnings of scientific agriculture in that country. Tranquilino Sandalio de Noda (*Memoria sobre el cultivo del café*, 1828) and Desiderio Herrera y Cabrera (born 1792) were other agronomists and economists whose writings promoted the economic development of Cuba. The chief Cuban theoretical work in political economy was Tranquilino Sandalio de Noda's

Tratado de economía política con aplicación á la isla de Cuba.

Sociology, although it had no separate existence in the university curricula, was at least equally productive. There was not sufficient national motivation to produce original economists and the Latin Americans were content to imitate. But their social situation was their own and it was unique. As Sarmiento had said in 1845, they had on their hands a constant struggle between civilization and barbarism. This struggle existed everywhere in Latin America, but the Argentines were perhaps most keenly aware of it and they produced the largest amount of work in sociology. Sarmiento and Alberdi were early leaders in this field. Esteban Echeverría preceded both of them in his thinking and published his *Dogma socialista* and *Plan económico* in 1846. Alberdi contributed in addition to his *Estudios económicos*, which was very largely sociological, also *Luz del día*, *El crimen de la guerra*, *Ensayos sobre la sociedad*, and Sarmiento wrote also *Argirópolis* (Santiago de Chile 1850), *De la educación popular* (Santiago de Chile 1848), *Recuerdos de provincia* (Santiago de Chile 1850), and numerous other sociological works. José María Ramos Mejía took up the burden sociologically, following the lead of Maudsley, Bagehot, Tarde and Le Bon. He began with *Las neuroses de los hombres célebres en la historia argentina* (1876-78) and closed with *Rosas y su tiempo* (1907). In between came *La locura en la historia* (1895), *Los simuladores del talento* (1904) and *Las multitudes argentinas* (1899). Perhaps the most candid of the Argentine sociologists in an age of candor and self-criticism was Agustín Alvarez (1857-1914), whose work overlaps the following century but in technique belongs to the nineteenth. His *Sud América* (Buenos Aires 1894), *Manual de patología política* (Buenos Aires 1899), *Educación moral* (Buenos Aires 1901), *Adonde vamos?* (1904), *La transformación de las razas en América* (Barcelona 1906), *Historia de las instituciones libres* (Barcelona 1909) and *La creación del mundo moral* (Buenos Aires 1912) afford an excellent sociological picture of the nineteenth century in Latin America. Juan B. Justo (1865-1928) should also be mentioned. His leading sociological works were *El método científico* (1896) and *La teoría científico de la historia y la política argentina* (1898). Most of the sociological writing before 1900 was an attempt at the interpretation of Latin American history. It was a local sociology, although ob-

viously and professedly it had been inspired by the work of Taine, Spencer and the French social psychologists. In Chile a similar sociological interpretation of history was undertaken by Simón Rodríguez (1771-1854), one of the inspirers of Sarmiento and Bilbao, as well as the teacher of Bolívar, in *Las sociedades americanas* (1828), and José Victorino Lastarria (1817-88), especially in his *Lecciones de política positiva* (1875) and his *Investigaciones sobre la influencia social de la conquista y sistema colonial de los españoles en Chile* (Santiago 1844), in which, according to Huneeus, he anticipated Buckle. Francisco Bilbao (1823-65), who wrote voluminously on American culture, must also be mentioned among Chilean sociologists of the time. But Chile also produced a more philosophic type of sociology, particularly in the early part of the century, as is evidenced by the work of Andrés Bello (1781-1865); José Miguel Varas (1807-33), a follower of Destutt de Tracy, in *Lecciones de filosofía moral*; Ventura Marín (born 1816), author of *Elementos de ideología*; and the *Tratado sobre las luces y las virtudes sociales* of Simón Rodríguez. José Gil Fortoul (born 1862) of Venezuela published in 1896 *El hombre y la historia*, and Rafael Nuñez of Colombia wrote *Ensayos de crítica social* (1860-74). Nuñez, who was president of Colombia, in 1883 introduced and expounded the philosophy of Spencer as a remedy for the prevalent political dogmatism fostered by his predecessors. Other Colombian sociological works of this period were *La iglesia y el estado en Colombia* (London 1885) by Juan Pablo Restrepo (1839-96), and *La educación de la mujer* by Medardo Rivas (1825-1901). Very early in the century a Peruvian, José Hipólito Unanue (1758-1833), produced *Ensayos sobre la educación de la juventud* and other works on the social aspects of education. An interesting sample of Cuban sociological writing, which quite generally has been more practical and concrete than that of the rest of Latin America, was the *Observaciones sobre la suerte de los negros en Africa, considerados en su propia patria y trasladados á las Antillas españolas*, by Juan Bernardo O'Graban (born 1782). Eugenio María de Hostos (1839-1903), a native of Porto Rico, published *Moral social* (Madrid 1901). Francisco García Calderón regards de Hostos as the most important Latin American philosopher after Bello. De Hostos long resided in Chile and taught there.

Throughout the nineteenth century the Latin

Americans made no clear distinction between political science and law, treating the former variously as *derecho público*, *derecho político*, *derecho constitucional* and *derecho internacional*. Courses in these subjects were given in the universities after the middle of the century, and in international law occasionally before that time. The term *derecho político* did not become common before the eighties or the nineties, when it had practically the same meaning we were beginning to apply to the theory of practical politics, or actual government. The early political leaders and philosophers drew largely from Rousseau; later they generally adopted the leadership of Bentham. The writings of de Tocqueville, Victor Hugo, Saint-Simon and Comte also had great influence. The noted Chilean lawyer and publicist, Francisco Bilbao, had studied under Lamennais in Paris. Lermnier's *Cours d'histoire des législations comparées*, 1835-36 (Paris 1836) had great influence upon the young Alberdi and his contemporaries. Other Europeans who influenced the political and social philosophy of Latin America were Quinet, Michelet, Fourier, Proudhon, Ahrens, J. S. Mill, Adam Smith, Say, Bastiat, Laboulaye, Bryce and especially Duguit and Léon Bourgeois among the more recent writers. Writers in the United States, especially those dealing with its constitution, profoundly influenced the Latin Americans. The works of John C. Calhoun were translated and published in four octavo volumes at Caracas in 1879. The constitutional treatises of Story, Kent, Curtis, Cooley and others were familiar to them through translations and were much quoted by them. These writings strongly influenced their own constitutional development, and it is a commonplace that very frequently the judges of Latin American courts followed North American supreme court decisions on constitutional questions down to 1900 or later.

Only a brief mention can be afforded of the writings in political science of the nineteenth century, although they were very numerous. Andrés Bello, a Venezuelan naturalized in Chile, philosopher, philologist, historian, sociologist, political scientist and reorganizer of the university at Santiago, was the real founder of the nineteenth century social sciences in Chile. He had resided in England from 1810 to 1829, where he came under the influence of Bentham and James Mill, and had then gone to Chile where he founded the Colegio de Santiago, and had taught among other things Roman

law, political and social science and international law. He was active in the preparation of the codes of the country and wrote *Principios de derecho internacional* (1840). He also supported José Joaquín de Mora in introducing the legal philosophy of Bentham into Chile, as earlier it had been introduced into Argentina through the instrumentality of Rivadavia. Other noteworthy Chilean productions were the constitutional works of Mariano Egaña (1793-1846), the *Elementos de derecho público constitucional* (2nd ed., Santiago 1848) by J. V. Lastarria, the founder of the faculty of law and political science at the University of Chile, and *La constitución ante el congreso* (2 vols., Santiago 1879-80), and *Estudios sobre derecho constitucional comparado* (Santiago 1889) by Jorge Huneeus Zegers (1835-89). The latter introduced the inductive method into the teaching of his subject and enjoyed a great reputation in Chile and elsewhere. His method was adopted and perpetuated by Valentín Letelier, who developed a new school in administrative law. In Bolivia the *Nociones de derecho público político* (La Paz 1898) and the *Nociones de derecho internacional moderno* of Federico Díez de Medina (1839-1904), the *Dogmas del derecho internacional* (New York 1870) of Agustín Aspiazu (born 1817), the *Derecho administrativo* (Sucre 1889) and *Derecho público constitucional* (1898) of José S. Quinteros, the *Derecho público* of J. M. Gutiérrez, the *Problemas políticos de la América del sud* (1895) and the *Derecho natural* of Luis Arce were important.

Colombian and Venezuelan writers on political science also have been numerous. J. M. Samper's (1830-88) *Derecho público interno de Colombia* (2 vols., Bogotá 1886); Federico C. Aguilar's *Colombia en presencia de las repúblicas hispano-americanas* (Bogotá 1884); Justo Arosemena's (1817-85) *Estudios constitucionales sobre los gobiernos de la América latina* (2 vols., 2nd ed. Paris 1878, first edition published in Paris 1870 as *Las constituciones de la América latina*), and *Apuntamientos para la introducción a las ciencias morales y políticas*; Rafael Nuñez' *La reforma política en Colombia* (Bogotá 1885); and the *Elementos de ciencia administrativa* (Bogotá 1840), the *Lecciones de derecho constitucional* (Buenos Aires 1869), *Las repúblicas sudamericanas y el "Uti rossidetis" de 1810* and *La libertad civil y el gobierno propio* (1872) of Florentino González (1806-75) are representative of Colombia. The last named work was a translation of Francis Lieber's *Civil Liberty and Self*

Government, published in 1853. He also translated J. S. Mill's *Representative Government* in 1865, and some of the state constitutions of the United States in 1870. His works were used widely throughout Latin America. Luis Sanojo's *Derecho político* (Caracas 1877) and José Gil Fortoul's *Filosofía penal* (1891) and *Filosofía constitucional* (1890) are fairly typical of Venezuela. Pablo V. Goyena's *Diccionario de la legislación rural de la república oriental del Uruguay* (Montevideo 1887) and his voluminous compilation of *La legislación vigente* (2nd ed. 1888) and Federico D. Acosta y Lara's *Los partidos políticos* (1885), one of the first works on this subject, *Filosofía del derecho* (2 vols., Montevideo 1890-94), and *Lecciones de derecho constitucional* may be cited for nineteenth century Uruguay. The *derecho público* of Argentina was comparable in development to that of Chile. In international law Carlos Calvo (1824-1906) and V. G. Quesada (1830-1913), voluminous and important writers and compilers of documents, Amancio Alcorta y Palacios (1842-1902), Luis M. Drago (1859-1921), author of the Drago doctrine, and Estanislao S. Zeballos were the outstanding figures. In constitutional law Alberdi, Sarmiento, V. F. López, J. M. Estrada, Francisco Ramos Mejía (1848-1900), in the latter half of the century, and Mariano Moreno, Bernardo Monteagudo, Rivadavia, Dean Funes and Dorrego in the early or revolutionary period, were the leaders. J. B. Alberdi, perhaps the greatest of the Latin American social scientists, was the author of the *Bases y puntos de partida para la organización política de la república argentina* (Valparaíso 1852), which served as the groundwork of the national constitution of 1853. The *Diccionario de legislación peruana* (Lima 1860) by Francisco García Calderón (1834-1905) of Peru has long been regarded as basic to public law studies in that country. Much the same may be said of the *Diccionario de legislación* of Germán Leguía y Martínez. The *Colección de los tratados* of Ricardo Aranda has already been mentioned. An early political philosopher and writer on public law was José María Pando (1787-1840) who wrote, among other things, *Pensamientos y apuntes sobre la moral y la política* (1837) and *Elementos de derecho internacional* (1843). Manuel Atanasio Fuentes (born 1828) wrote a *Derecho constitucional universal*. The Latin Americans have been much preoccupied with international relations because of their numerous boundary disputes and their financial difficulties with

European governments, and more recently with the United States.

In the field of law there was little originality in Latin America in the nineteenth century, aside from the fact that the primary interest was in public law, for which the Latin Americans had unique materials and needs. Their greatest contribution, not wholly underived from Latin Europe, whose system of private law they took over almost entirely, was the sociological emphasis in law, which long antedated the somewhat similar recent movement in the United States. This sociological trend in law and legal theory was in part the logical consequence of the foundation principles of the Roman civil law, but especially of the Comtean or positivist spirit which reached Latin America, chiefly through Taine, Spencer and Buckle, and found a very ready response there. The newness of their culture and the relative directness of the response they found it necessary to make to their physical environment gave an excellent background for the reception of positivism. But particularly the reaction of the first two generations after independence against the church, which they found so largely in opposition to their republican principles, confirmed them in this new viewpoint. As Huneeus says of Chile, "modern positivistic science has delivered the study of legislation and law over to the dominion of sociology." The same might be said of other Latin American countries toward the close of the nineteenth century, although the transformation was wrought primarily through the subject called philosophy of law, which for half a century has been taught everywhere in their universities as an introduction to the study of law and legislation. But the content of this course has been primarily sociological and anthropological rather than legal and technical, as it has been in English speaking countries.

The law schools devoted their energies primarily to the study of principles and to the analysis of codes rather than to the study of the intricacies of judge made law, which is so necessary in common law countries like ours. They had records of cases; and important cases, with the arguments and opinions, were often published by the lawyers concerned. But case law never achieved anything like the overwhelming importance it has had among us. They were interested in the law largely as a social science and directed their efforts to its simplification and standardization. All forms of

the law were codified. These codes, quite naturally, were at first based on the Spanish codes, but later came to embody the best principles of the codes of other European countries, and showed an increasing tendency toward revision to fit local conditions as the demands of their development made this necessary. These codes and their frequent revisions were universally prepared by the law professors rather than by private practitioners and politicians. The law schools, after the decline in importance of theology with the successful issue of the revolution, assumed the most active educational leadership in all the countries and, with the exception of the state, became the most influential secular institutions.

We may summarize this very brief analysis of nineteenth century social science in Latin America by saying that the most significant developments were in history, political science and sociology. It was in these subjects and in geography, in which their own experiences counted for most, that they showed the greatest originality. Their peculiar practical political and social problems, especially intense during the first half of the century, placed a premium upon philosophic and sociological analysis and synthesis and made necessary the creation of a political science—*derecho político* and *público*—which would fit their own needs. The response in the social sciences, considering the poverty of their universities and the lack of opportunity for specialization, was highly creditable and significant. In the fields of law and economics, except for the socialization of their law and their work in those phases of applied economics which touched their own particular national problems, they were much less original. This was undoubtedly because of their retarded economic development and the inherited similarity of their domestic institutions to those of Latin Europe, from which they derived their law.

III. RECENT TRENDS. Many new developments were taking place in the social sciences in Latin America by 1900. The reorganization of the universities on a more modern basis began in the sixties and seventies and was becoming effective in the eighties. By 1900 the national universities—the best universities in Latin America are supported by the national governments—had become cosmopolitan in character and were beginning to take their place among the universities of the world. In 1910

Mexico reestablished her national university, and now every South American republic has one or more national universities. Argentina has five. The universities are also broadening their scope. The faculties of law and the social sciences, sometimes called law and the political sciences, continue to teach the social sciences, as they did throughout the nineteenth century. The national universities of Buenos Aires and Havana and the Catholic universities at Bogotá and Santiago have established faculties of philosophy and letters, in which history and the social sciences, including geography and archaeology, receive more adequate attention. The universities of Buenos Aires, the Littoral (Argentina), Uruguay, San Marcos (Peru), Chile and the National School of Finance and Commerce of Salvador have faculties of commerce and business administration built around economic studies. Chile has a Social Service School, the only one so far in Latin America, where scientific training for relief work has not been especially emphasized. This school issues a standard review, *Servicio social*. Venezuela has two schools of political science at Trujillo and Valencia. Rural economics and sociology are now being taught in most of the agricultural faculties to be found in all of the countries, and agricultural cooperation is being strongly promoted. In a number of countries, particularly in Colombia and Bolivia, there are separate schools of law in addition to those connected with the different universities. Generally only doctors and licenciates of the national or public institutions are licensed to practise the professions and are qualified to hold certain types of governmental positions. There have been some overt political conflicts of authority between church and papal representatives and the national governments, such as the recent one in Mexico and the famous expulsion of the papal nuncio from Argentina by President Roca in 1884, which help to explain these regulations. In addition to university instruction in the social sciences, these subjects are beginning to be included in the normal and secondary schools. Civics first followed history (an old subject) here, and now sociology and economics are being included in some places, notably in the Colegio Pedro II of Rio de Janeiro and various Argentinian schools. Accordingly, less emphasis is being placed upon the old classical studies. Educational reform, particularly of the universities, is much discussed and many volumes are issued dealing with this subject.

In some countries secular control of education has gone farther than in the United States. This theme is ably discussed in *Las dogmas, la enseñanza y el estado* (Montevideo 1927) by Professors J. C. Grauert and Pedro Ceruti Crosa of Uruguay.

Two leading trends in law have been manifest since 1900. One of these is toward a greater emphasis upon case law and less philosophic discussion of principles. This is due largely to the German and North American influence, especially in corporation law. On the other hand the philosophy of law has shown some tendency to become less positivistic and sociological and more neo-Hegelian and neo-Kantian. This second tendency is due largely to the influence of Bergson, Del Vecchio and Stammler, reenforced by the disillusionment regarding the omnipotence of science for good resulting from the late war. Law is the most prolific field of Latin American social science literature. Men like Alfredo Colmo and Alfredo L. Palacios (*El nuevo derecho*, Buenos Aires 1920) of the University of Buenos Aires are beginning to systematize and rewrite the principles of the civil law from a critical and sociologically constructive standpoint. International law perhaps still commands the strongest public interest. There have been numerous writers in this field, of whom Drago and Quintana of Argentina and Oliveira Lima of Brazil have perhaps been most outstanding. In constitutional law the large four volume work *Estudios constitucionales* (La Paz 1920) of José Carrasco of Bolivia and the works of José Matienzo of Buenos Aires deserve special notice.

The close relation between sociology and law is perhaps as well illustrated in *derecho criminal* (criminal law) as elsewhere. The subject is commonly divided in the universities into two fields or courses, general and special, which correspond pretty closely to our criminal law and our criminology and penology, respectively. Two interests have been active in criminology since the seventies. One has its source in the Italian school of criminal pseudo-psychiatry, only recently outgrown. The other derives from the North American school of penology, reenforced by modern European schools. The report and recommendations of the Cincinnati meeting of the National Prison Association of 1870, destined to be so influential in this country, were translated, published and disseminated throughout Latin America by a Colombian diplomat who attended the sessions.

This document went far toward fixing penological practise. Enrico Ferri also has had great influence upon Latin American criminological theories, but more recently the German penal code has been much consulted, especially under the leadership of Juan P. Ramos, professor at Buenos Aires. Dr. Jorge E. Coll, of the same university, has been very influential in introducing modern methods of correctional treatment of juveniles, as has also Ernesto Nelson.

The work of Matienzo in *derecho político*, or actual government, resembles in many respects that of such northern scholars as Beard, Young, Holcombe and Merriam. The Cuban, Francisco Carrera Jústiz (born 1857), has done important work in municipal affairs, writing extensively on city government, utilities and administration. He also founded the *Revista municipal y de intereses económicas* in 1906. Another Cuban, Enrique Hernández Cartaya (born 1877), has specialized particularly on the primary and has published, among other works, *El régimen electoral de la república de Cuba*. Other Cubans working in the field of politics and international relations are Gustavo Gutiérrez y Sánchez, Fernando Sánchez de Fuentes and Salvador Salazar. Two Bolivians, Daniel S. Bustamante and Federico Díez de Medina, have done important work in international relations. In Uruguay Luis Alberto de Herrera (born 1873), in international law, Baltasar Brum (born 1883), in international politics, Justino Jiménez de Aréchaga (born 1882) and Juan Andrés Ramírez (born 1875), in constitutional government and law, are typical of the work now being done in all the more advanced Latin American countries, too vast to be mentioned in detail. All of these men are, of course, teachers of their subjects in their national universities.

In history, critical scientific investigation has increased steadily since 1900. The University of Buenos Aires has been perhaps the most prolific center of historical investigation, beginning with the too little appreciated work of Juan Agustín García, whose *Ciudad indiana* appeared in 1900. Some of his students, notably Roberto Levillier, Ricardo Levene and Emilio Ravignani, have made investigations of a very high grade. The first, besides producing an excellent work entitled *Los orígenes argentinos* (Paris 1912), has in recent years been editing the early national documents pertaining to Peru, Bolivia and Argentina. Levene has written a very modern history of Argentina and has

specialized in the economic history of the Rio de la Plata region. His *Historia económica del virreinato del Plata* (La Plata 1927-28) is the standard in this field. Ravnani is director of historical research in the University of Buenos Aires. It is an interesting indication of the close relation of history and sociology in Latin America that the latter two men at one time taught sociology. Levillier's *Nueva crónica de la conquista del Tucumán* (vol. i, Buenos Aires 1926) is as much sociological and archaeological as historical. The works of David Peña and Rodolfo Rivarola in Argentina, of Vicente Dávila and C. Parra-Pérez (*Miranda et la révolution française*, Paris 1925, and *Bolívar*, Paris 1928) of Venezuela, of Ramiro Guerra y Sánchez (*Historia de Cuba*, vol. i, Havana 1921), Francisco Carrera Jústiz (*Historia de las instituciones locales de Cuba*) and Jorge Le Roy Cassá (*La historia y la prensa médica de Cuba*, 1917) of Cuba, must be taken as representative of scores of other historians throughout Latin America of whom space forbids mention. Many of these countries, like Mexico in its *Archivo diplomático mexicano*, are publishing authoritative series of historical documents carefully edited and interpreted by well-trained scholars. Likewise historical investigation of an adequate character is now being financed by the government and undertaken by private initiative in the more progressive of these countries, especially in Argentina, Chile, Venezuela, Brazil, Peru and Mexico. Some of the leading writers of texts in history since 1900 are Carlos Navarro y Lamarca (Argentina), M. Ordóñez López and L. S. Crespo (Bolivia), João Ribeiro (Brazil), C. J. A. Villacorta (Central America), L. Galdames (Chile), J. M. Henao and G. Arrubla (Colombia), Ramiro Guerra (Cuba), C. Destruge (Ecuador), Luis Pérez Verdía (Mexico), C. Báez (Paraguay), C. Wiesse (Peru), Hermano Damascenas (Uruguay) and Felipe Tejera (Venezuela).

Archaeology has been cultivated largely in connection with history as well as independently, and much good work has been done. Florentino Ameghino's (1854-1910) *Filogenia* (Buenos Aires 1884) and *Antigüedad del hombre en el Plata* (2 vols., Paris 1880-81) have not withstood the test of time, although they are widely known. Arístides Mestre (born 1865) and José Varela Zequeira (born 1859), both Cubans, wrote works of an anthropological character, the former in his *El problema de la colonización* (1887) and the latter in his *Carácter*

actual de los estudios antropológicos (1889). Mexico, Chile, Bolivia, Peru and Argentina have been most active in developing these fields of social science. There have been several prominent men in Mexico in this field, including Crescencio Carillo y Ancona, an early writer, Marcos E. Becarra, F. Belmar, Leopoldo Batres and Alfonso Caso. Other typical workers in this field are Luis Montané of Cuba, José Arrechavaleta of Uruguay, Ernesto Restrepo Tirado of Colombia, José Toribio Medina and Tomás Thayer Ojeda of Chile, Moises Bertoni, Carlos Fiebrig and Tomás Osuna of Paraguay, Arthur Posnansky of Bolivia and Juan B. Ambrosetti of Argentina. Two Germans who have done distinguished service in standardizing archaeological work in Latin America are Max Uhle, formerly of Lima and now at Quito, and Hermann Beyer, now at Tulane University. There is also an International School of Archaeology and Ethnology in Mexico. Professorships in archaeology and in anthropology have been established in the leading universities.

It was around 1900 that Ernesto Quesada added to the prevailing nationalistic sociology a more systematic theoretical treatment of sociology (*La sociología*, Buenos Aires 1904), which won the applause of Lester F. Ward. This lead was followed in Argentina by Alfredo Colmo (*Principios sociológicos*, Buenos Aires 1905), Enrique Martínez Paz (*Elementos de sociología*, Córdoba 1911), J. A. García (*Apuntes de sociología*, Buenos Aires 1909, 1912), Raúl Orgaz (*Estudios de sociología*, Buenos Aires 1915) and José Oliva (*Sociología general*, vol. i, Santa Fé 1924) of the same country, and by Mariano H. Cornejo (born 1866), of Peru, who wrote *La sociología contemporánea* (revised and translated into French as *Sociologie générale*, 2 vols. Paris). The writers on general sociology in Latin America were influenced by Comte, Spencer, Tarde, Durkheim, and more recently by Prieto, Simmel and Spengler, and by North American writers through Spanish and French translations made by Adolfo Posada and others. L. F. Ward, Giddings and Ellwood have successively exercised much influence. Cornejo has been influenced mainly by the folk psychology of Wundt, Valentín Letelier by the positivism of Comte, Orgaz by Simmel. But general sociology as a basis for legal and legislative interpretation has suffered recently from competition with the neo-Kantian and neo-Hegelian spirit in the philosophy of law. Nationalistic sociology is still dominant in Latin America and will con-

tinue to be so for some time to come. Among the writers of this type since 1900 José Ingenieros (1877-1925) of Argentina, author of *Sociología argentina* (Valencia 1913), *Criminología* (Madrid 1913), *La evolución de las ideas argentinas* (vols. i and ii, Buenos Aires 1918-20), etc., was clearly preeminent. Other prominent sociological writers of this period are Daniel S. Bustamante (*Principios de sociología*), M. R. Paredes (*Política parlamentaria de Bolivia*), Alcidas Arguedas (*Pueblo enfermo*, Barcelona 1909), Bautista Saavedra (*El Ayllu*, Paris 1903), of Bolivia; F. J. Oliveira Vianna (*Psycologia social*, 1921, and *Populações meridionaes do Brasil*, 1920), of Brazil; Fernando Ortiz y Fernández (*El hampa afro-cubana*, Madrid 1906, *La reconquista de América*, Paris 1910, and numerous works on Negro and immigrant criminality, nationality, race, culture, etc.), Francisco Carrera Jústiz (*Sociología municipal*, *Estudios de economía social*, *Estudio de sociología política*, *Conservadores y liberales*, *Estudios político-sociales*, Havana 1911, *El socialismo municipal*, etc.), Pablo Desvernine y Galdós (born 1854) (*El derecho y la sociología*), Orestes Ferrara (*Machivavel*, Paris 1928), Ramiro Guerra (*Azúcar y población en las Antillas*, Havana 1927), of Cuba; Antonio and Alfonso Caso, Toribio Esquivel Obregón, Ezequiel Chaves, Vicente Lombardo Toledano, Norberto Domínguez and José Vasconcelos, of Mexico; Justo P. Prieto and Ignacio A. Pane (*Apuntes de sociología*, Madrid), of Paraguay; Carlos Vaz Ferreira, José Enrique Rodó, Emilio Frugoni and Alberto zum Felde of Uruguay; and A. L. Palacios (*La fatiga y sus proyecciones sociales*, Buenos Aires 1922), José M. Paz Anchorena (*La prevención de la delincuencia*, 1918) and Juan B. Justo (*Teoría y práctica de la historia*, Buenos Aires 1909), of Argentina. Much in applied sociology, in the fields of criminology, immigration, standards of living, juvenile welfare, etc., is also being written, especially in Cuba, Chile, Uruguay, Argentina and Brazil, but cannot be mentioned in detail. These fields of interest, excepting criminology and immigration, date almost wholly from 1900 or later. One of the most influential of the nationalistic and philosophico-ethical sociologists of the early twentieth century is Francisco García Calderón, the younger (born 1883). His *La creación de un continente* (Paris 1912) is one of the better surveys of the evolution of Latin American institutions. *Les démocraties latines de l'Amérique* (Paris 1912, translated into English as

Latin America, London 1913) is perhaps the most telling of Latin American defenses of the Latin civilization against the Anglo-Saxon. *Le Pérou contemporain* (Paris 1907) is an analysis of Peruvian civilization, while his *Hombres é ideas de nuestro tiempo* (Madrid), *Profesores de idealismo* (Paris) and *Ideologías* (Paris) are studies and appreciations of leading European and American social thinkers and thought. *Los países de la América latina* (Madrid 1915) of Alfredo Colmo of Argentina is one of the more dependable sociological analyses of Latin American civilization in some of its more fundamental aspects.

The development of economics since 1900 has been most striking both in the universities, as previously mentioned, where various faculties or schools of commerce and business have been established since 1903, and in journalism. Still, however, the economics treatises deal almost wholly with practical economic problems, and especially with finance. No first rate general work on economics has yet been written or published in Latin America. This is perhaps due largely to the fact that practical problems are too pressing and the professors still lack sufficient time for an adequate presentation of theory. This preoccupation with the practical problems of society is generally characteristic of sociology, political science and even history, as well as of economics. For their general theory they are usually content to depend largely upon writers in other countries.

It would, however, be a mistake to suppose that there are not able economists in Latin America. A few examples of such are Guillermo Subercaseaux (*Monetary and Banking Policy of Chile*, Oxford 1922), Santiago Marín Vicuña (*Los ferrocarriles de Chile*, 4th ed. Santiago 1916), Julio Zegers and Marcial Martínez, of Chile; Gutiérrez Darío (*Política económica*, 1910), Manuel A. Elías (*Finanzas prácticas de Bolivia*, La Paz 1915), José Gutiérrez Guerra (*Cuestiones bancarias*, La Paz 1910, and *La reforma bancaria*, La Paz 1913), Casto Rojas (*Cuestiones económicas y financieras*, La Paz 1909, *La moneda de oro en Bolivia*, Lima 1912, *Historia financiera de Bolivia*, La Paz 1916, etc.), of Bolivia; Leopoldo Cancio y Luna of Cuba; Eduardo Acevedo (*Economía política y finanzas*, 1903, *Historia económica y financiera de la República Oriental del Uruguay*, 2 vols., Montevideo 1903, *Legislación obrera*, Montevideo 1914, and *Temas de legislación financiera*, Montevideo 1915), Pedro Cosío (*Accidentes del*

trabajo, 1908, *Tarifas de aduana*, Montevideo 1910), Gabriel Terra (*Economía política, La industria lechera and Unificación de deudas del año 1883*), of Uruguay; Enrique Martínez Sobral and Carlos Díaz Dufoo, of Mexico; Lucas Caballero, Julio Caro, Alfonso López, Esteban Jaramillo, Simón Araujo, F. de P. Pérez and Enrique A. Gaviria, of Colombia; Eusebio and Elío Ayala and Rodolfo Ritter, of Paraguay; and Alberto B. Martínez and Maurice Lewandowski (*The Argentine in the Twentieth Century*, English translation, London 1911), Juan A. Alsina (*La inmigración europea en la república argentina, La inmigración en el primer siglo de la independencia*, Buenos Aires, 1910, *Población, tierras y producción*, Buenos Aires 1903, and *El obrero en la república argentina*, Buenos Aires 1905), Emilio Coni (in agricultural economics), Alejandro Bunge, Isidoro Ruiz Moreno, Juan B. Justo (translator of Marx and national senator from Buenos Aires), etc., in Argentina. The subject of statistics, although recognized throughout the nineteenth century, developed slowly until after the establishment of the schools of commerce and business, and it has not yet been applied to any considerable extent to the other social sciences.

Auxiliaries to the social sciences, such as public libraries, museums, professional periodicals and learned societies, have not been particularly well developed, owing to lack of financial resources, relatively small reading populations and insufficient specialization. Nearly all of the countries now have one or more historical reviews and economic journals. The law reviews are even more numerous. Practically all of the large national universities publish high grade journals to take care of the productions of their professors, and some of them issue series of research studies besides. There are also good journals in political science, but sociology, because it is more of a leavening spirit than an independent discipline, usually finds space in the other social science journals and in the philosophic reviews. Writers on archaeology, anthropology and geography depend largely upon the university reviews and studies, although some geographic societies have their own bulletins. The life of these journals is frequently precarious, for reasons mentioned, but when one disappears another, as a rule, soon takes its place. The scholars are not wholly dependent upon professional journals for publication, for the better dailies, such as *La Nación* and *La Prensa* of Buenos Aires, and

the numerous general magazines of the better class, such as *Nosotros*, *Amauta*, *Mercurio Peruano*, *Revista do Brasil*, *Cuba contemporanea*, *Revista Chilena* and *Sagitario*, constantly carry high grade articles in all the social sciences. In no other part of the world, perhaps, does the general periodical press sustain such a heavy load of scholarly material. This capacity results in part from the great interest of Latin Americans in learning and also from the fact that universal literacy and commercial advertising have not yet combined to degrade the character of their publications. The retail business is still carried on in relatively small units. It should also be noted that most writers and teachers in the social sciences have or have had some connection with serious general journalism, either as contributors or as editors. Most of the leading general reviews are edited by university professors, and professors are very frequently employed on the staffs of the great dailies.

The public libraries have not until recently been adequate for research purposes. There are only twelve libraries in Latin America with 100,000 or more volumes each. These are the national libraries of Mexico, 800,000; Chile, 783,956; Buenos Aires, 425,000; Cuba, 207,423; Costa Rica, 100,617; Colombia, 100,000; Uruguay, 100,000; Library of the Brazilian Historical and Geographical Institute, 124,000; Portuguese Library, Rio de Janeiro, 100,000; Buenos Aires public municipal library, 100,900; the library of the University of La Plata (Argentina) 110,000; and the library of the Academy of Sciences, Havana, 101,000. Of these 3,052,000 volumes, approximately, in the twelve leading libraries of Latin America, 636,000 volumes, or more than one fifth, are in Argentina. This predominance in books is paralleled by her predominance in most other respects. It is to be noted that all of these twelve libraries combined have about as many volumes as the Harvard University library alone contains. Only one Latin American university library contains as many as 100,000 volumes. Other university libraries most nearly approaching this in size are those of the Catholic University of Chile, 50,000; University of Lima, 47,000; University of Córdoba (Argentina), 35,000; University of Havana, 30,000 volumes. The bar association of Buenos Aires has a library of 32,411 volumes and the faculty of economic sciences of the same city has 9030 volumes. The public library of the Sociedad

Económica de Amigos del País (Friends of the Country) of Havana contains 60,382 volumes. The largest public libraries are La Paz municipal, in Bolivia (30,000 volumes); Santo Domingo municipal, in the Dominican Republic (2014); Guayaquil municipal, in Ecuador (32,687); National, in Guatemala (24,000); National, in Honduras (15,000); Panama (10,500); National, in Paraguay (12,000); National, in Peru (62,000); National, in Salvador (14,500); and National, in Venezuela (60,000). Argentina, Peru, Mexico and Cuba are fairly well supplied with books accessible to the public. Not all of these of course are social science books. One of the best libraries specializing in social science in Latin America is that of the faculty of law and the social sciences of the University of Buenos Aires. In 1926 it contained 17,000 volumes. Many of these libraries are uncatalogued or very inadequately catalogued. The memory of the librarian is the chief aid to be sought in locating books in such cases.

Under the circumstances here mentioned it may seem remarkable that any considerable amount of research could be done in the social sciences in these countries. But a great deal of excellent research is carried on in those which are more advanced. Public libraries of any size are relatively recent and are still but little used, comparatively speaking. Deficiencies of this sort have been made up largely by the splendid private libraries of the leading scholars. Vicente and Ernesto Quesada (father and son) accumulated a library of some 75,000 volumes, which is now in Germany, and Oliveira Lima, of Brazil, a larger one, now at Washington. Felipe Paz Soldán (Peru), José Toribio Medina (Chile) and E. S. Zeballos (Argentina) also collected large private libraries. There are similar private libraries in these and other countries, many of which contain from ten to thirty thousand volumes. Some of these are now being sold to public libraries in Latin America and abroad. One of the results of the growth of public libraries is the democratization of research in the social sciences and the increase of proletarian literature in this field. It is to be noted that the production and publication of radical literature are much more flourishing in Latin America than in the United States. Publishing methods are still comparatively primitive and publication costs are relatively low. Cast plates are still the exception rather than the rule, but the volume of pub-

lication, especially in the social sciences, is surprisingly large. Books are ordinarily published in paper covers at the price of one dollar to a dollar and fifty cents, a fact which encourages a large circulation. Book stores, both new and second hand, in the larger Latin American cities are more numerous and usually larger than in this country. The greatest handicap to publication is the small size of most of the countries, providing an insufficient cultural base and consequent meager buying power for literature discussing the national questions which constitute their chief concern. But the possession of a common language and civilization does much to offset this difficulty. Latin Americans still publish many of their books in Spain and in France, because of better publication facilities there and because it is often easier to distribute them to other Latin American countries from these centers than from any of their own publishing centers. They are also great readers of Spanish and French books, less of Italian and German books, and very little of English and North American publications. After the revolutions in Latin America, French thinkers dominated Latin American thought for three quarters of a century. But North American thinkers also had much influence until near the end of the nineteenth century, and many of our books were translated into Spanish.

Historical societies exist in practically every country. In some countries there are several such societies, with considerable collections of documents, periodicals and books. This is particularly true in Mexico, Peru, Chile, Colombia, Bolivia, Argentina, Cuba and Uruguay. The National Archives at Buenos Aires, for example, occupy a large building, the former post office of the nation, and consist of a vast number of precious historical documents, which are being gradually worked over into monographs under government patronage and by private initiative. In other countries similar processes are being carried out in more than a score of centers. Latin America is now one of the richest fields for historical research and it is only beginning to be exploited adequately. Research facilities in the other social sciences are less developed. Archaeology comes next in point of development, then anthropology, economic history and conditions, political problems, and sociological and social welfare data, constituting about the order in which materials and data are being collected and

interpreted at the present time. The research technique itself has not always been perfected or employed by Latin American scholars. Users of their books and materials are sometimes disappointed in the lack of definiteness with regard to facts cited, the absence or uncertainty of dates and other guides necessary to an adequate picture, faulty and indefinite citations of sources, proof-reading, indexing and the like. But in such matters of scholarship technique there is a rapid improvement.

By way of general summary, it may be said that under the colonial rule and the dominance of the clergy social science was limited almost wholly to history, archaeology, law and such phases of political and social philosophy as could be covered in canonical law, natural law (*derecho natural*) and theology. With the coming of the national period in the nineteenth century, law and history shifted largely to a political and sociological interest. This was especially true after 1850. *Derecho público*, and later *derecho político*, or practical government, dominated law and sociological interpretation dominated historical writing and teaching. This in large measure still continues to be true, but as the democratic tradition weakens and as the commercial and financial preoccupation of the people becomes more marked, there is an increasing emphasis upon private, civil and international law, and upon economics to the disadvantage of *derecho político* and sociology. Never has there been wanting originality in the manner of handling characteristic Latin American problems in social science, but the fact

that this civilization was less well developed than those of Europe and North America has made the Latin Americans in large measure dependent upon their distant neighbors for much of the method and content of that part of their social sciences which is not of indigenous origin.

L. L. BERNARD

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X

Japan

The teaching and dissemination of the social sciences in Japan began after the historic Restoration of 1868, which marks the rise of the Japanese people as a modern power under Emperor Meiji. This restoration ushered in an era of renaissance which destroyed feudalism and gave rise to liberalism. Japanese thought, which had long been confined to ancient lore and immemorial traditions, was suddenly flooded with new ideas from England, Germany, France and the United States. For her revolutionary transformation, social, economic and political, and her astonishing progress in material civilization, Japan has been immeasurably indebted to the social sciences of the West.

The courses of instruction introduced into Tokyo Imperial University in 1871 included law, economics, political science and statistics. Since these subjects were hitherto unknown in Japan, the government invited instructors from France, England and the United States, and sent students to Europe and America who afterward returned to teach at the home university. Today the departments of social science in Japanese universities offer courses in law, political science, statistics, sociology, social politics, education, ethics, philosophy and philology. And in connection with all these branches of knowledge there are learned societies with official organs of publication (see appended list).

In the early years of Meiji Japan was in great need of legal advisers and legally trained government officials. Emphasis was therefore laid on the study of law, and a number of private law schools and colleges were established which even today occupy a prominent position among institutions of higher learning. With the advent of modern industrialism following the Sino-Japanese War of 1894-95, the importance of economics was recognized, and numerous public and private colleges and graduate schools came into existence for the purpose of giving instruction in economics and commercial science. At present, among social science publications, those on economics and social problems outnumber all the rest.

In the study of political science discussion during the seventies and eighties of last century centered on liberty and the rights of the people. The utilitarianism of Jeremy Bentham and John Stuart Mill was introduced by Yukichi Fukuzawa and Keiu Nakamura; the *Social Contract* of Rousseau and the philosophy of Montesquieu, by Chomin Nakai; the ideas of Herbert Spencer and of the German schools, by Hiroyuki Kato. Early students of political science and law, like Nobushige Hozumi, Kencho Suematsu, Kenjiro Ume and Nariaki Tomii, went to England or America; but later Germany attracted more Japanese scholars, and German schools began to acquire greater prestige.

The laws of Japan were drawn after European models. C. F. Boissanade, a Frenchman, and H. Rösler, a German, made respectively the first drafts of her criminal and her commercial codes. The constitution, promulgated in 1889, was based partly on the philosophies of Lorenz von Stein, Gneist and Spencer. At present, besides instruction in Japanese law, the universities offer as a rule courses in English, German and French law.

With the development of capitalism since the beginning of the present century, the idea of democracy, as propounded in America, has made a popular appeal. The peace movement and international questions are receiving more and more attention, and the League of Nations Association has branches in most of the universities and colleges.

Sociology, like other branches of the social sciences, developed under western tutelage. Shoichi Toyama, who went to England in 1876, occupied the chair of sociology at Tokyo Imperial University until 1897. He lectured principally on Herbert Spencer, and was an exponent of social evolution. Nagao Ariga was also a noted Spencerian in Japan. Tongo Takebe, who succeeded Toyama, was a follower of Comte and his positivism. It was Takebe who presided over the Japanese Institute of Social Science from 1912 to 1922, and published the ten volumes of its annuals. About that time,

at Waseda University, Riyukichi Endo held the chair of sociology, and delivered lectures which showed the influence of Giddings, Tarde, Durkheim and Simmel. Mention should also be made of Shotaro Yoneda, who studied personally under Giddings and Tarde and has been teaching sociology for the past twenty years at Kyoto University. He introduced into Japan various western schools of sociology, especially those of Germany and France, which command the largest following today.

The political economy of England and America was introduced into Japan during the period from 1860 to 1870 by Yukichi Fukuzawa, the founder of Keio University. A little later, Tameyuki Amano, a professor at Waseda University, appeared as a protagonist of the orthodox school of economics of John Stuart Mill. Still later, Kenzo Wadagaki and Nobu Kanai of Tokyo Imperial University introduced the new German methods of A. Wagner and von Schmoller. Then, in opposition to capitalistic economics, appeared socialistic economics. Hajima Kawakami, a professor at Kyoto University until 1928, lectured on Marxism. It may be noted that today a considerable amount of empirical study of Japanese economic history is being carried on.

The modern industrialism which followed the Sino-Japanese War, and the marked capitalistic tendency that developed after the war with Russia inevitably and rapidly widened the gap between rich and poor, occasioning frequent conflicts between the two classes. The situation caused a group of socialists to organize an Association for the Study of Social Problems in 1897, and an Association for the Study of Socialism in 1898, while at Tokyo Imperial University scholars of the German school preached state socialism and the need of social politics. Finally the leaders of different branches of the social sciences organized the Society of Social Politics in imitation of the Verein für Sozialpolitik of Germany. The society opposed the doctrines of both socialism and laissez-faire, and while upholding the principle of private ownership endeavored to find a means of preventing class conflicts and of effecting social equilibrium through individual initiative and governmental authority. With this object in view the society published, up to the year 1919, articles by various writers in its *Proceedings of the Society of Social Politics* (12 vols.). In 1919 the Ohara Institute of Social Research was founded by private donation.

This is the largest institution of the kind in Japan; it issues the *Labor Year Book*, the *Year Book of Social Work* and other publications. Originally organized for the study of labor problems and social work, the institute of late seems more exclusively interested in Marxism.

In the field of social statistics Kyoji Sugi was a pioneer in Japan; he contributed greatly toward perfecting population statistics and the national census. Another scholar, Iwasaburo Takano, professor at Tokyo Imperial University until 1919, introduced the method of von Mayer; it is largely due to his work and teaching that the science has attained its present status. The names of A. Quetelet and Mayo-Smith may be mentioned among western scholars who have been influential in this connection.

Anthropology was introduced into Japan by an American, Edward S. Morse, who published an article in 1879 in the *Memoirs of the Science Department* (University of Tokyo, vol. i, pt. i) on his discovery of the shell mound of Omori, near Tokyo. Shogoro Tsuboi, who as a student assisted Morse in the excavation of the shell mound, was the first to occupy the chair of anthropology at the Imperial University, and it was he who founded the Anthropological Society of Tokyo in 1884. Léon de Rosny was the first man to make anatomical measurements of the Japanese as a racial stock, while E. Baelz made a detailed comparative study of the Japanese in relation with the Ainu, the Mongol, the Manchu, the Korean and other neighboring peoples. Anthropology during this period was largely based on Darwinian concepts, but later R. Martin's method of measurements was adopted, and also the sero-anthropological method. The study of physical anthropology is mainly connected with the department of science, and cultural anthropology with the department of letters. The most recent methods of approach are the psychological and the cultural-historical.

Adult education is being carried on by the central and local governments, as well as by private religious organizations and societies. They provide courses of lectures, utilizing evenings, holidays and vacation periods. These lectures correspond to the instruction given at continuation schools, and are also intended to give proper civic training. Occasional lectures and courses of lectures are given from time to time by various libraries and newspapers.

Heretofore the central government has done

practically nothing to promote labor education, although the Ministry of Education is now planning to conduct model workers' institutes once or twice a year. There are, however, a dozen or more labor schools in various cities conducted under the auspices of local governments, trade unions, the National Association of Manufacturing and Mining Labor Education, and the Tokyo Imperial University Settlement. The Cooperative Society of Labor and Capital is also engaged in labor education, and conducts at Tokyo an institution for that purpose called the School of Social Politics.

The principal societies concerned with the social sciences, and their publications, are as follows:

- The Juridical Society, founded in 1884: *The Journal of the Juridical Society*, monthly.
- The Association of Social and Political Science, 1869: *The Journal of the Association of Social and Political Science*, monthly.
- The Kyoto Legal Society, 1906: *The Law Review*, monthly.
- The Kyoto Economic Society, 1915: *The Economic Review*, monthly.
- The Sociological Society of Japan, 1924: *The Japanese Journal of Sociology*, monthly.
- The Anthropological Society of Tokyo, 1884: *The Journal of the Anthropological Society of Tokyo*, monthly.

- The Statistical Society of Tokyo, 1878: *The Journal of Statistics*, monthly.
- The Historical Society, 1890: *The Journal of History*, monthly.
- The Kyoto Historical Society, 1916: *The Historical Review*, quarterly.
- The Association of Municipal Research, 1922: *City Problems*, monthly.
- The Teiyu Ethical Society, 1897: *The Journal of the Teiyu Ethical Society*, monthly.
- The Ohara Institute of Social Research, 1919: *The Labor Year Book of Japan*, etc.
- The Cooperative Society of Labor and Capital, 1919: *Social Reform*, monthly.
- The Central Association of Social Work, 1908: *Social Work*, monthly.
- The Faculty of Economics, Tokyo Imperial University: *The Journal of Economics*, quarterly.
- The Faculty of Economics, University of Keio: *The Journal of Mita Society*, monthly.
- The Department of Political Sciences, Waseda University: *The Waseda Political Science Review*. The Law Association, Waseda University: *The Law Review*.
- The Kobe Commercial Institute: *The National Economic Review*, monthly.
- The Tokyo Graduate School of Commerce: *The Study of Commerce*.

TEIZO TODA

XI

United States

The development of the social disciplines in the United States appears to fall into three fairly well defined periods: first, the formative period prior to 1860; second, the period of development and differentiation from 1865 to 1900 or later; and third, the period of maturation and synthesis, especially after 1900.

I. THE FORMATIVE PERIOD. Law and theology were the first of the social disciplines to secure constructive definition in the English North American colonies. Theology, although the most important college subject in this period—with possibly the exception of the classics—was only slightly and indirectly social in character, and may therefore be considered only incidentally in this article. Its primary aim was to provide formulae for the adjustment of man to the supernatural and only incidentally to secure a working adjustment of man to man. This latter function it early left to philosophy and, after the rise of the secular power in Europe, especially to law. Even in colonial Massachusetts, where theocracy held partial sway throughout the seventeenth and a portion of the eighteenth centuries, law was technically the basis of political control. By the end of the seventeenth century in Massachusetts the common law had definitely achieved the upper hand in political control, although it was well into the eighteenth century before the professional lawyer could claim any considerable respect and confidence from the people. The rule of the clergy during the first century or so was, however, aside from the strong personal influence they exerted, not so much through ecclesiastical law as through the common law. The clergy throughout the colonial period rivaled the lawyers themselves—still comparatively few in number—in their purchase and reading of law books.

At the time of the early English settlements Coke was expounding the common law in England, and at the period of the beginnings of a national spirit in the colonies, between 1750 and 1775, Blackstone brought forth his *Commentaries*. These were imported into this

country and were republished in 1771 at Philadelphia. In 1803 the first of five volumes of an edition of Blackstone with American notes, edited by St. George Tucker, professor of law and politics at William and Mary College, appeared at Philadelphia. After 1800, and perhaps even before, the new legal problems and relationships in the colonies began to cause a considerable divergence from the content of the English common law, with the result that American textbooks and commentaries began to appear. This divergence was perhaps strongest in the middle colonies and in New England, where the economic organization differed most from that in England. In 1790 James Wilson, a member of the Supreme Court of the United States, began a course of lectures on law in the University of Pennsylvania which apparently involved an American and local reaction to the English common law system. In 1794 Chancellor Kent of New York began his famous lectures on law, which were finally issued in 1826-1830 in his *Commentaries* in four volumes, long the outstanding general treatise on American municipal law and frequently used (especially the first volume) as a text in public law. Kent was followed and preceded by a long list of textbook writers dealing with special phases of the law, the more outstanding of whom were, in this early period, perhaps Story, Choate, Greenleaf and Wheaton. As the law became more complex and as cases accumulated, the commentaries of Blackstone and Kent no longer sufficed as literary sources and guides to the study of the law, and special treatises or textbooks, as they were called, appeared in increasing numbers. Before 1800 all of these textbooks—very few at the best—were English. The first American textbook was Caine's *Lex mercatoria americana* (1802). Joseph Story's first text, on *Pleadings*, appeared in 1805. The growth of the law was particularly active in the period between 1830 and 1867, and the textbooks produced included the best works of Story, Angell on *Corporations*, Walker's *Introduction to American Law*, Bouvier's *Law Dictionary*, Greenleaf's *Evidence*, Sedgwick's *Dam-*

ages, Parsons' *Contracts* and Browne on *Statute of Frauds*. All of these treatises were still, in revised form, in use in the 1880's. Law periodicals also began to be published after 1830, but none of those established before 1860 now survives, at least in its old form. Before 1790 only four incomplete series of law reports were prepared, and only one of these was published before 1800. After 1825, and especially after 1840, the number of reports and digests and other aids to the practising lawyer, as well as to the student, increased rapidly, until by 1860 there were already signs that the wealth of such publications was becoming a burden. The economic development of the country had proved a great stimulus to the legal profession, and the indefiniteness of the common law, dependent, as it was, primarily upon precedent rather than principle, had served to increase the volume of litigation in a rapidly changing economic and social order.

The lawyer himself began to be a man of great public importance after 1750, when life in the colonies was rapidly making a transition from local and individual problems to those having national and social significance. In such a situation the theologian and preacher were no longer competent to serve effectively as leaders, and as yet there was no group or profession of men trained in political theory and administration. Consequently the mantle of leadership now fell upon the professional lawyer, who at one time, especially in New England, had been mistrusted and despised. When the colonists succeeded to the government after 1775, the lawyers were almost the only persons with sufficient training to act for the people. Accordingly, with the new emphasis upon education and especially upon secular education, after about 1730 and particularly after 1750, instruction in the law also became popular. Burke was able to say in 1775 that "in no country perhaps in the world is the law so general a study." But such study was carried on in the offices of successful lawyers and by clerks and apprentices in the courts. Apparently the first formal instruction in law was established by King's College in New York in 1755, where the fourth year of the curriculum was described as containing, among other things, "the Chief Principles of Law and Government, together with History, Sacred and Profane." The College of Philadelphia announced in 1756 instruction in law in practically the same words. In 1773 King's College established a professor-

ship in natural law (which most probably included some instruction in municipal or civil law) with the Rev. John Vardill as professor. In 1779 William and Mary had a course on "Law and Police." Other colleges followed in the establishment of chairs in municipal law (frequently including government or public law), such as Pennsylvania (1790), Columbia (1794), Transylvania (1799), Middlebury (1806), Harvard (1817), Maryland (1823), Yale (1824) and Virginia (1826), with twenty-two additional colleges giving instruction in law before 1860. A number of private law schools, founded and taught usually by a single individual, also began to spring up, beginning with the Litchfield, Connecticut, school in 1782 or 1784. Altogether more than twenty of these were established in nine or more states before 1850. As the colleges and universities began to give more adequate attention to the professional training of lawyers after 1865, the relative importance of the private law schools declined, except possibly in large commercial centers where they still flourish primarily as short course night schools for students otherwise employed during the day.

But it was, after all, relatively a simple civilization in which the professional training of a lawyer could prepare adequately for political leadership. If legal training met the needs of the times better than theological training after 1750, a new sort of training in the social sciences became necessary for the guidance of the American people in their social development, especially after 1860. The beginnings of instruction in history and the social sciences are of course to be found much farther back. Ethics, politics, moral philosophy and history all appeared as separate subjects (although not as separate chairs or departments) in the Harvard curriculum for 1643, and American history was being offered at William and Mary as early as 1731. Languages themselves, to which so much emphasis was given until very recently, were not just a medium of instruction in grammar and syntax, as they finally came to be in their declining years, but embodied in the reading texts the best history and politics, and perhaps even economics, that had been written before the eighteenth century. Also, along with instruction in theology there was always teaching in the law of nature and of nations, which was more in the character of political philosophy and ethics than philosophy or metaphysics proper. The works of Aristotle, coming down from the

Middle Ages, and of Grotius, Pufendorf and, in the late eighteenth and early nineteenth centuries, of Vattel and Burlamequi, were in the curricula of the higher grade colleges. Especially after the first third of the eighteenth century, when secular philosophy began to have a place distinct and apart from theology in the curricula, was this social subject matter dealing with public affairs made available to young college students. In the College of Philadelphia in the 1750's all of these works, as well as the political and ethical writings of Locke, Hooker, Sidney, Harrington, Fortescue and Hutcheson, were listed in the course of study and, with individual variations, the same was true of the other colleges of the day and continued to be so until the social sciences proper entered their curricula about 1800.

Although the need for social sciences was felt before the middle of the eighteenth century they did not develop as separate disciplines with anything like the rapidity with which law developed. The reasons for this are clear. There was no outstanding profession to make these sciences their chief interest and occupation, as there was for law and theology. The governmental administrators who might have held this relation to social subjects were the "political" appointees of a "foreign" power which neither trusted the colonists nor was trusted by them, especially after 1750. Indeed it is only within the last half century that our governmental organizations have sought and established any considerable functional relationship with the social disciplines. Yet the Rev. Hugh Jones saw the need of such a connection in 1724 and proposed that William and Mary should be recognized as the training school for the civil service of the colony. Franklin also saw the importance of such a relationship and attempted to make provision for instruction in the social subjects in the College of Philadelphia, as is shown in his plan of 1749. In his plan these subjects were arranged principally under the generic curricular term "history." Other plans for national universities and research institutions, put forth by Washington in his will in 1789, by Benjamin Rush (1787), by "a private citizen of Pennsylvania" (1788), by Dupont de Nemours (1800) and by Joel Barlow (1806), emphasized without exception the necessity of giving instruction or of conducting research in politics, and most of them also emphasized the importance of political economy and history. This advocacy was further continued by Jeffer-

son and Madison and their contemporaries, and the tireless energies of Jefferson in behalf of training in politics and political economy finally made these ideals realities, first at William and Mary College, and then at the University of Virginia and various other colleges and universities.

Another early obstacle to the adequate development of the social studies on an inductive and factual basis, as distinguished from the logical and aprioristic basis used by theology and the law of nature and of nations which afterwards gave way to moral philosophy, was the lack of an adequate documentary basis. The municipal or common law had this basis in the decisions of the courts, which had been collected and reduced to some sort of order in the commentaries of Coke and Blackstone, and later in those of Kent and in the textbooks. But politics and political economy had no comparable documents. There were the works of Plato, Aristotle, Grotius, Hobbes, Locke, Montesquieu and other writers, but when these were departed from, the meager facts of recorded history afforded little from which to generalize except hearsay and speculation. As yet there was no methodology for the collection of contemporaneous facts and their generalization statistically or otherwise, such as we now constantly make use of in the social sciences. Historical facts, then the only considerable reliance for induction in the social disciplines, were still very meager and not always well tested and verified. The eighteenth century indeed produced some outstanding historians, such as Gibbon, Robertson and Hume, with a new sense of responsibility for the accuracy of their data and for the reliability of their conclusions, but even these were far behind the critical school of historians of the nineteenth century in these very matters. Yet history had more data for inductive generalization and for the construction of descriptive narratives than any other social discipline, and it was history that first developed an independent position in the college curricula and as a social discipline.

History in some form was taught and written from the beginnings of collegiate and cultural activities in the colonies. The earliest record of courses at Harvard (1643) lists history for the winter term. It was probably taught at William and Mary from its opening as part of the dichotomy of *historia naturalis* and *historia civilis*. In 1722 the Hollis professorship of divinity was established at Harvard, including

church history and Jewish antiquities. A history professorship was proposed for William and Mary by the Rev. Hugh Jones in 1724, and in 1731 the Rev. William Stith was teaching American history there. King's College listed "geography and history" in 1754, and the College at Philadelphia taught civil history by 1756. The College of New Jersey was teaching "geography and chronology" by 1761. At Yale ecclesiastical history was taught by President Stiles by 1778. The Rev. John Gross at Columbia taught a very comprehensive course in history, based largely on geography, from 1784 to 1795. It was not until well after 1800, however, that history generally disentangled itself from the classics and theology (the Bible) and achieved an independent footing. Even Jefferson, in his plan for the University of Virginia, was content to leave history tied up with the classical and modern languages, since even in his time most of the historical source material still remained embedded in these languages. There were neither adequate translations nor textbooks prepared for classroom use. Jefferson, in outlining a course of reading in modern history soon after the opening of the nineteenth century, was forced to draw almost entirely upon the contents of such voluminous standard works as those of Hume (of which he did not think very highly), Robertson, Gibbon, Rapin, Millot, Hallam, Voltaire and Russell. The Bohn translations, which made available for general use the best classical and modern works, did not begin to appear until well after the opening of the century. It was also about the beginning of the second quarter of the nineteenth century that a series of historical textbooks especially prepared for and adapted to college instruction began to take the place of the longer general narratives and the largely philosophical and partisan treatises of Bossuet, Montesquieu and Ferguson. Even these last named treatises had appeared, for the most part, late in the eighteenth century.

Historical instruction was also closely associated with a number of other subjects in the eighteenth and early nineteenth centuries. Among the most important of these were the subjects of classical and Jewish antiquities. It is difficult to discover just when these subjects arrived at the status of separate courses and had independent textbooks prepared for them, but it appears to be evident that from an early date the teachers of Greek, Latin and Hebrew felt the necessity of presenting explanatory material

regarding the geography, customs, institutions and history of the peoples whose language and literature they were teaching. They probably also realized the value of this means of giving a more formal instruction in those materials that we would now call the social sciences. Out of this movement doubtless came Fénelon's *Télémaque* and that very pretentious work on Greek civilization by J. J. Barthélemy entitled *Travels of Anacharsis*. The latter work appeared in France late in the eighteenth century, was well known in translation in America by 1804, and was intended to be used as a text on the institutions, laws, customs and history of the Greeks. Texts on classical and Jewish antiquities were very popular during the first half of the nineteenth century in the United States, Adam's *Roman Antiquities* (1791) and Nevin's *Summary of Biblical Antiquities* (1829-30) in particular having a wide circulation. For many students and general readers such works were practically the only sources of formal instruction in what we would now call politics, economics and sociology. History was also closely associated with geography throughout the colonial period, and indeed has not yet lost this connection. Franklin had emphasized this relationship in his plan of 1749, and the Rev. John Gross, professor of German and geography at Columbia College from 1784 to 1795, made it a living reality.

Ancient history was most emphasized in the eighteenth and early nineteenth centuries. Jefferson said as late as 1825 that only England and France among modern nations had histories worthy of study. Rome was still the great object of historical writing and teaching. Although before 1800 history was not much taught as a separate subject apart from the classics, theology and antiquities, it was appealed to by all of the leading statesmen and thinkers, such as John Adams, Hamilton, Madison and Jefferson, to justify their schemes and theories. Its prestige steadily increased as the spirit of inductive generalization, modeled after the growing work of the natural sciences, developed. Furthermore it represented the more democratic tendency in the college curriculum, while the classics stood for the aristocratic outlook, and theology was the embodiment of conservatism. History was at that time practically the only open door to an understanding of the thought and behavior of the modern world. In particular, American history was the only academic avenue to an understanding of

the American world in which the students and the general readers lived. Consequently practically all historical writing before 1825 had dealt with local American history, including an occasional excursion into United States history, after the national spirit had been formed by the republic. Among the more interesting of these were Winthrop's *History of New England from 1630 to 1649* (1790), Bradford's *History of the Plimoth Plantation* (ms. 1856), Prince's *Chronological History of New-England* (1736-55), Stith's *History of the First Discovery and Settlement of Virginia* (1747), Hutchinson's *History of the Colony of Massachusetts Bay* (1764-67), Belknap's *History of New-Hampshire* (1784-92), Chalmers' *Political Annals of the Present United Colonies* (1780), Hazard's *Historical Collections* (1792-94), Cotton Mather's *Magnalia Christi Americana; or The Ecclesiastical History of New-England* (1702), and Beverley's *History and Present State of Virginia* (1705). It is interesting to note that most of these histories dealt with New England, where consciousness of social destiny and of aim was strongest, but Virginia also was well represented.

After 1825 separate historical instruction was given with increasing frequency in the colleges, and modern history rather than ancient history was the first to gain independent status. Ancient history in most cases continued to be associated with the classics until 1860 or later. American history in particular began to be stressed in the colleges, perhaps as an expression of the growing national spirit. Although American history had been taught at William and Mary in 1731, there were apparently no imitators among the colleges before 1800. The first separate chair in history was established at Harvard in 1839, with Jared Sparks as professor. Sparks was interested mainly in modern history and particularly in American history, in which field he did most of his writing. He also edited Smyth's *Lectures on Modern History*, thus greatly facilitating the study of modern history in this country. Two other men who greatly influenced the development of history teaching at this early date were Thomas R. Dew, professor at William and Mary between 1826 and 1846, and president from 1836 until 1846, and Francis Lieber of South Carolina College and Columbia. Dew's *Digest of the Laws, Customs, Manners, and Institutions of the Ancient and Modern Nations* (1851) placed historical study on a singularly modern basis.

Teaching politics and political economy and philosophy as well as history, he was largely concerned with making the lessons of the past significant for modern students. This is a note in historical teaching that is apparent in much of the teaching of history in the second quarter of the nineteenth century and particularly in that of Lieber, Sparks and Bowen. Lieber, perhaps the greatest scholar in the social disciplines in the United States before 1865, was particularly interested in historical interpretation as a guide to social understanding. He became professor of history and political economy at South Carolina College in 1835, and transferred to Columbia College as professor of history and political science in 1857. Sparks' successors at Harvard, Bowen and Torrey, followed largely in his footsteps, with perhaps an increasing interest in modern European history; and other colleges, especially Yale, Michigan, Wisconsin, Virginia and Pennsylvania, instituted modern instruction in history, more or less completely divorced from the dominance of the classics and theology. In 1850 Pennsylvania established the first distinct chair in American history, under William B. Reed, and this chair continued its separate existence until 1856, when Reed retired.

After 1825 a new interest in the writing of history also developed. This interest was due in the main to two factors, rather distinct in their origins, but which fused and perhaps re-enforced each other in the end. One of these was the rapidly developing nationalistic spirit, already mentioned; the other was the increasing contact of young university men with European universities where they came under the influence not only of the new critical spirit in historical writing, especially manifest in Heeren, but also of the enthusiasm for historical study then arising, especially in Germany. Irving and Prescott wrote extensively in the field of Spanish and Spanish American history, and Motley in a closely related field, that of the Netherlands when they were asserting their independence of Spanish rule. Not yet, in the first half of the nineteenth century, was the romantic tradition of the Spanish civilization dead in this country. Even after 1865 we find traces of it in the writings of E. G. Bourne and a few others. Francis Parkman caught the spirit of colonial enterprise on the frontier and preserved to posterity in his remarkable series of histories this phase of our national civilization. But Bancroft, a student of Heeren, was the first to envisage in

its completeness the meaning of our national development and to reduce it to a historical picture. Whatever its errors of technique and of viewpoint and interpretation, Bancroft's history of the United States is a great monument to the new concept and understanding of our nationality, in this respect fully comparable to the more recent and more technically perfect works of McMaster, Rhodes and Channing. The histories of Tucker and Hildreth in this period are but weaker, and sometimes more sectional, negatives of the same general theme.

Interest in the social sciences was also strong in this period before 1860. In many respects, particularly in the colleges, it was keeping pace with interest in history. Already we have noted the strong interest of Franklin, Washington, Jefferson and Madison in instruction and investigation in practical politics. They realized that a self-governing people must also be highly self-conscious politically. But politics, in spite of this emphasis upon the subject by the early national leaders, found it very difficult to secure a separate foothold in the college curriculum. We have seen that ethics and politics were taught at Harvard in 1643, and the graduating theses of Harvard and other institutions in the early eighteenth century disclose a deep, if largely scholastic, interest in public questions. In 1754 King's College listed instruction in commerce and government. The College of Philadelphia had an introduction to laws and government in 1756. William and Mary introduced work in politics in 1779, and Yale sometime between 1777 and 1789. The widespread study of Grotius, Pufendorf, Hobbes, Locke, Burlamequi, Vattel and other political and natural law writers in this same century also testified to the interest of teachers and students in political philosophy.

The development of politics before 1860 occurred primarily in connection with moral philosophy, municipal or professional law, international law and history. Moral philosophy and international law were the successors of the old subject, the law of nature and nations, which began to break up into these two newer disciplines soon after 1750, when the impulse to realism coming from the new economic and political problems of the times was rendering the old metaphysical methods of the law of nature and nations school relatively obsolete. Political philosophy as such found a place in the new moral philosophy, while the data and rules of politics were best covered by inter-

national law, although this subject also for another hundred years carried a considerable, if decreasing, burden of speculation regarding the nature and sanctions of natural law. Local and national politics were as yet but poorly developed and could still be handled in connection with history, which was primarily political history, and municipal law. One of the phases of history, already mentioned in connection with Dew, Lieber, Sparks and Bowen, which began to obtain increasing recognition after 1825—the philosophic interpretation of history—had arisen in large measure as a means to the generalization of political, social and economic tendencies from the data of history. Consequently the philosophy of history was one of the avenues through which political philosophy was taught. The works of Montesquieu, Ferguson and Robertson, and even of Gibbon, well known in this country, emphasized this aspect. When Guizot's lectures on the *History of Civilization* appeared in the second quarter of the century, this work almost immediately became the vehicle for the political interpretation of European history. Hallam's *View of the State of Europe during the Middle Ages* also provided a similar, if somewhat less popular and less fascinating medium. Both of these books continued in frequent—Guizot's in almost universal—use until the eighties.

Politics also made another close contact with history through the development of constitutional history. Perhaps the earliest definite step in this direction was taken at Transylvania College. In 1813 an anonymously edited source book entitled *The Constitutions of the United States of America with the latest Amendments, also the Declaration of Independence, Articles of Confederation, with the Federal Constitution* was printed at Lexington, Kentucky, by Thomas T. Skillman. It was reprinted in 1825. Also Jefferson and Madison planned a course of readings in politics for the University of Virginia in 1825, including Sidney's *Discourses*, Locke's *Essay Concerning the true original Extent and End of Civil Government*, the *Declaration of Independence*, the *Federalist*, the *Virginia Report of 1799*, and the *Inaugural Speech* and the *Farewell Address* of George Washington. By 1854, when Bowen produced his *Documents of the Constitution of England and America*, even before the English work of Stubbs had appeared in the same field, the constitutional history approach to the study of American government had already become well established in our

colleges. The study of the constitution was in fact, aside from the study of international law, the chief content of courses in politics, until the nineties of the past century. On the one hand this formal approach through the constitution was historical, as already noted. On the other hand it was analytical and legalistic, or in the nature of public law. This approach was due to the influence of the instruction in law. The faculties of the early colleges were small, frequently limited to from three to five or six men. Also, the classics, mathematics, philosophy and theology were already firmly established. To add a new course was as a consequence a serious problem, if not actually prohibitive. As we have seen, the subject of law began to get a foothold in the more progressive institutions toward the end of the eighteenth century in response to popular demands and public needs. In a number of institutions, and particularly in those dominated by Jefferson—William and Mary, Transylvania and Virginia—and in Harvard and Columbia, professorships in law were established. Almost universally the professors of law also taught, as appendages, the social sciences. This was true at William and Mary as early as 1779, and St. George Tucker of William and Mary, who was the first to edit Blackstone for this country, carried on the teaching of politics as well as of Blackstone after his succession in 1789. Tucker himself wrote several treatises on politics, including *Of the Several Forms of Government*, *Of the Constitution of Virginia*, and *View of the Constitution of the United States*, aggregating 446 pages. He published these political writings as appendices to the first volume of Blackstone's *Commentaries* in 1803. When Kent's *Commentaries* appeared in 1826 the first volume immediately became a text in public law, especially in eastern colleges, where it was added to the *Federalist* in this capacity. The early lawyers had a strong political as well as legal interest, and it was not until near the middle of the century that instruction in law became so highly professionalized that its teachers and students lost contact with the governmental and public aspects of their subject. In the South, under Jefferson's influence, more attention was given to Rousseau's *Social Contract*, especially at William and Mary, and to Destutt de Tracy's interpretation of the political philosophy of Montesquieu, which was prepared at Jefferson's request. But, on the whole, the historical and public law aspects

of politics won out in spite of the manifest wishes of Franklin, Washington, Jefferson and Madison, due to the more strategic position and greater influence of history and law in the colleges. International law developed as a separate discipline, partly under the tutelage of the law schools and partly within the liberal arts colleges. The works of Wheaton, especially his *Elements of International Law* (1836) and *History of the Law of Nations in Europe and America* (1845), gave to the United States a high position academically in this field.

That the study of practical politics was not entirely dead after 1825, although largely overshadowed by political philosophy and constitutional history and analysis, is evidenced by the work of Lieber, who published his *Manual of Political Ethics* in 1838-39 and *On Civil Liberty and Self Government* in 1853. There were also other outstanding writings in the field of politics, although fewer than in history. John Adams had presented his theory of the true nature of government in his *Defence of the Constitutions of Government of the United States of America* in 1787-88. John Taylor, senator from Virginia and philosophical expounder of the Jeffersonian democracy, had written several volumes in the first quarter of the century developing his theme. Calhoun's *Disquisition on Government* (1851) and *Discourse on the Constitution and Government of the United States* (1851), although decidedly academic and Aristotelian for a practical politician, were nevertheless masterly works. Mansfield's *Political Grammar of the United States* (1834), Beverley Tucker's *Series of Lectures on the Science of Government* (1845), Grimke's *Considerations upon the Nature and Tendencies of Free Institutions* (1848) and Hildredth's *Theory of Politics* (1853) also deserve mention in this connection. The courses in moral philosophy which flourished throughout the first half of the nineteenth century and discussed political as well as social questions, often in a very realistic manner, also helped to keep alive a considerable interest in practical politics in the colleges. In a number of chairs or "schools" or departments of moral philosophy separate courses with such titles as the "Science of Government" and "Civil Polity" were offered, as was the case at Wisconsin after 1851 and at Mississippi after 1854.

Political economy more readily received separate recognition in the curriculum, partly because it was a more practical subject, but especially because there were textbooks that

could be used for instruction, at least from the time of Adam Smith's *Inquiry into the Nature and Causes of the Wealth of Nations* (1776). Also, political economy did not so readily lend itself to the methods of historical treatment, since the business man and the statesman wished to know present and future economic trends rather than the history of economic movements. As early as 1754 King's College included commerce in its curriculum, and in 1756 the College of Philadelphia listed the subject, "Introduction to Trade and Commerce." In 1792 a professorship in "economics" under the direction of Samuel Latham Mitchill was founded in Columbia College, but the "economics" was apparently agronomy. As early as 1784 professorships in commerce and agriculture were planned at Columbia, but there was evidently no other issue than that mentioned above. The beginnings of political economy proper are quite uncertain. Bishop Madison may have used the *Wealth of Nations* at William and Mary in connection with his general work in moral philosophy as early as 1784, but this is mainly conjectural. John Gross seems to have been teaching some political economy in his course on moral philosophy at Columbia in the late eighties, or at least in the nineties. In any case it is pretty clear that the *Wealth of Nations* was used as a text at William and Mary by 1800 or before, and that it continued so to be used, with perhaps some intermissions, until Destutt de Tracy's *Treatise on Political Economy*, translated and published at the instance of Jefferson in 1817, was introduced at that institution. William and Mary held a very prominent position in the early teaching of political economy as well as of politics in general, due to the influence of Jefferson, and this position was perhaps augmented in the administration of President Dew.

Probably the first chair bearing the title "Political Economy" was that of moral philosophy and political economy at Columbia College, occupied by Professor McVickar from 1818 to 1859. Harvard established a course, although not a professorship, in political economy sometime between 1817 and 1820. Torrey, the successor of Jared Sparks, became tutor in history and political economy in that institution in 1844. Bowen became McLean Professor of Ancient and Modern History and Instructor in Political Economy in 1850, and in 1871 Charles F. Dunbar occupied at Harvard the first chair devoted exclusively to political

economy in the United States. The second chair actually to include the title of political economy was that of chemistry and political economy organized at the College of South Carolina in 1824 and occupied by Thomas Cooper. Courses in political economy were established fairly rapidly in other colleges: at Princeton in 1819; at Dickinson in 1822, which organized a mixed chair in the subject in 1826; at Bowdoin in 1824, which had a lecturer in civil polity and political economy at that time; at Rutgers and Yale and Virginia in 1825; at Union in 1827; at Brown, Dartmouth and the College of Charleston in 1828; at Amherst in 1832; at Williams in 1836, where a chair in rhetoric and political economy was established; and at various other colleges thereafter. The subject was probably taught in every college of importance by 1860, although it achieved the status of a separate subject in the curriculum rather late in some of the colleges—as late as 1853, for example, at Pennsylvania. The first course in the economics of business, under the title of "Commerce, Political Economy and Statistics," was offered at the University of Louisiana (now Tulane) in 1849 by DeBow. But DeBow resigned in 1853 to become director of the census.

The literature of political economy, both of the academic and the non-academic type, in the period before the Civil War was much more voluminous than the literature of politics, especially if we eliminate political speeches and legislative addresses. Destutt de Tracy's *Treatise on Political Economy*, written by an immigrant, has been mentioned. McVickar's *Outlines of Political Economy*, adapted largely from McCulloch, appeared in 1825. That universal genius, Thomas Cooper of South Carolina College, published two closely related works on the subject: *Lectures on the Elements of Political Economy* (1826) and *Manual of Political Economy* (1833). Wayland's *Elements of Political Economy* (1837), Potter's *Political Economy* (1841), intended for his students at Union College, and Vethake's *Principles of Political Economy* (1838) were not very profound works, but were primarily the outcome of the attempts of the authors to teach a relatively new subject. Wayland at Brown and Vethake at Princeton, Dickinson and Pennsylvania successively did much to popularize the subject without themselves specializing in it to any considerable extent. The *Principles of Political Economy* of Henry C. Carey, published in 1837-40 at

Philadelphia, was a much more pretentious effort, although it did not wholly satisfy the teachers of his or of any generation. European texts were also largely used. Smith's *Wealth of Nations* was popular in Virginia and J. B. Say in the North. Bowen's *Principles of Political Economy* (1856), like Carey's later writings, defended the protective system.

This long formative period before 1860 may be characterized as one of emergence. History arose primarily out of theology, the classics and other foreign languages, where it had been a secondary interest, and it received separate integration as an academic subject by a process of separation from geography, antiquities, language and theology. As an academic subject it also had its origins in part in literary history, which had grown up from the chronicle and the narrative of adventures, arising from the almost universal desire to keep a record and to recall important events. Politics and political economy, on the other hand, sprang, academically speaking, in the main from the old law of nature and of nations and more immediately from moral philosophy. These subjects also had their foundations in the practical everyday interests and observations of people regarding their own world. In fact this practical contemporaneous basis of interest and stimulus became steadily stronger from 1750 to 1860 and served in an increasing degree to shape the content and method of the social disciplines. It transferred the emphasis from ancient to modern history, and especially to American history. It also made political economy largely a study of American questions, such as banking, currency, protection, credit and land systems, in spite of the strong European currents in theory in other directions. It could not, however, prevent politics from becoming largely formalized as the study of constitutional history and public law. The literary and controversial aspects of these two social disciplines, as distinguished from their purely academic aspects, were even more local and responsive to American issues and needs than their formal phases. And the same is true of literary history in the United States. Law, however, responded less markedly to the American environment, because it was based on the theory of precedent and had its origins in the English court decisions. But even law made a considerable response to local needs, especially after 1825, at first on its literary side and later on the side of juridical theory and practise. The most

characteristic aspect of the law in this period, after the acquisition of its academic status, was its increasing professionalization. History, politics and political economy, however, did not develop in the direction of professionalization, with the possible exception of politics at the College of South Carolina after 1835, but together contributed a very large addition to the general cultural values of the college curricula in this period. They were highly symptomatic of the expanding range of vision with regard to the richness and meaning of life in the modern world and particularly in America. At the same time they were making marked contributions to an attempt at a more specialized and effective adjustment of people to that world. All aspects of life—economic, political and social—were expanding rapidly in richness and complexity in the period between 1750 and 1860, and the growth and establishment of the social disciplines in the colleges and in the literature represent a sort of collective response to that fact. Although all of these disciplines were strongly influenced by foreign models and content, the growth of American individuality and of local response to local needs was after all marked.

II. THE PERIOD OF GROWTH AND DIFFERENTIATION. From the close of the Civil War to the close of the century, and even later, the social disciplines underwent important transformations and enjoyed a remarkable period of growth. It was essentially a period of differentiation of subject matter and of definition of scope and method. The increased attention given to the social studies has been almost astounding, especially from 1880 to the present time, and perhaps increasingly since 1900. Until after the Civil War the classics had ruled the curriculum of the colleges, and the general idea of culture spread abroad among the educated classes was that of a literary and esoteric type. Theology had ruled the colleges down to the middle of the eighteenth century, because the colleges were originally founded primarily to teach the doctrines of particular denominations and to train young men for the ministry of those doctrines. But with the establishment of separate chairs in divinity at Harvard (1722) and at Yale (1755) theology began to be segregated from the curriculum as a whole, and by the end of this century the curricula were pretty well secularized. In the larger colleges of the central and

southern states this had occurred by the middle of the eighteenth century. Now the teaching of theology began to be segregated into separate theological schools. But the theological spirit did not disappear from the American colleges, especially in the social disciplines, until nearly the close of the nineteenth century, when the development of the spirit and content of science had become so marked that mystical and aprioristic interpretations were no longer good form. Cliffe Leslie remarked in 1880 that the theological outlook in political economy was still dominant in the United States, and the same might have been said of the other social disciplines. Bancroft, for example, frequently recognized the hand of God in history.

This development in the direction of a definite group of social sciences was apparently due to a number of factors. One of the most important of these was the growth in volume of science, and especially of the social sciences, relative to the classical, theological and literary elements of the curriculum. The maturing of the industrial revolution had its effect upon the colleges in a number of ways. It made a heavy demand upon them for the training of industrial, commercial and financial experts to serve the corporations. As a consequence technical schools were established, beginning with engineering and mining, and progressing up through the more material and exact sciences to agriculture, business, education, journalism and social work. Law, medicine and theology had already undergone professionalization. As the industrial complexity reacted upon the social life to increase its intricacy, the guidance of the expert and the delegation of all sorts of functions to those trained to perform them became a patent necessity, extending even into those relations of life which had previously been regarded as essentially personal. At first the tendency was to establish special professional schools for the provision of such technical training, thus leaving the colleges to pursue their traditional classical and literary interests. But this trend was practically reversed by an act of the federal government which had no such end in view. In the sixties the Morrill Act was passed by Congress providing subventions to the several states that would establish colleges giving training in agriculture and mechanic arts. The poor and needy state universities, which had been fighting a drawn—in some cases a losing—battle with the denominational schools eagerly seized upon this subvention. Its ultimate effect was to

establish the practise of giving professional training in the colleges, which now rapidly expanded into universities. Even the private colleges now found it much easier to secure gifts from philanthropic persons, who had profited from the industrial and commercial development of the country, for technical training than for the expansion of the old classical curricula. The inevitable effect of all this was that the arts colleges, surrounded by the new spirit of scientific investigation and the emphasis upon the practical and the contemporaneous, found it necessary to expand their curricula if they wished to share in the growing prestige and prosperity of the universities. The universities had ceased to be cloisters and had suddenly become active, eager, functioning elements in the social order. The bold step of President Eliot in introducing and popularizing the elective system completed the conditions favorable to the growth of the social disciplines. The elective system gave them a chance to grow without establishing independent schools or colleges in the universities at a time when they were not ready for professionalization. The fact that the early development of the social disciplines, partially excepting law, occurred within the colleges of liberal arts undoubtedly had a most lasting effect upon these subjects. It prevented their premature professionalization and assured a marked theoretical and cultural development of their subject matter before this step was taken. It also gave them an opportunity to develop their content and subject matter when funds could not yet have been obtained for the establishment of separate divisions in the universities.

The new expansion first occurred in the subject of history. In 1857 the greatest teacher and writer in the social subjects in the United States, Francis Lieber, had been brought from South Carolina to Columbia, but his primary interest in history did not get full scope for its development, due to his preoccupation with political science and even with law in the latter institution. It was in 1857 also that Torrey succeeded Sparks at Harvard. By 1870 Torrey and Bowen, who taught political economy as well as moral philosophy, etc., had come to dominate the senior year at Harvard. After 1870 Torrey continued to develop in the direction of constitutional history and politics, and by 1884 there were no fewer than seventeen courses in these two subjects, and three more in Roman law, offered by eight teachers in this

institution. After 1883, when A. B. Hart and Edward Channing joined the department of history, the subject developed rapidly. Perhaps it was the brilliant leadership of Henry Adams, who taught at Harvard from 1870 to 1877, that gave the necessary impulse to expansion in the new history for which Torrey had laid the foundations. Since the nineties Harvard has been one of the leading centers for the training of instructors in history and politics or government in this country. What was happening at Harvard in the seventies and eighties was also occurring at Michigan, Cornell and Johns Hopkins, although in slightly different ways and with somewhat different emphases. In 1857 Andrew D. White had gone to a chair at Michigan, in which history was the leading subject taught. He had studied in France and Germany and had brought back with him a strong passion for the historical viewpoint and the scientific method of historical investigation. He introduced this new attitude at Michigan and imparted it to one of his students, Charles Kendall Adams, who also studied in Germany and later became White's successor when the latter left Michigan to enter politics in New York state in 1863, and later to become president of Cornell in 1867. Under these two men the work in history at Michigan was greatly expanded. In 1878 there were at least four instructors in the various phases of the subject. Until C. K. Adams went to Cornell the department at Michigan ranked among the four most important in the country in this field. What White and his successor had done at Michigan, White and an able group of men he gathered about him at Cornell did for that institution. At the opening in 1868 White organized a college of history and political science and associated with himself such men as Goldwin Smith, Theodore Dwight, W. C. Russel and W. D. Wilson (professor of moral and intellectual philosophy and teacher of the philosophy of history). In 1881 Moses Coit Tyler, C. K. Adams, Herbert Tuttle and Edward A. Freeman (as lecturer) were added to the staff of the college, which had by this time become somewhat depleted. The eighties marked the golden age of history at Cornell, for after that decade White's stimulating influence was removed.

The last example of the "big four" in history in the seventies and eighties was Johns Hopkins. This university had opened its doors in 1876, pledged to the German ideal of scholarship and

investigation, but it was not until 1880 that Herbert B. Adams became leader of the famous Hopkins seminar in history. He was almost as much political scientist and sociologist as historian, and Richard T. Ely was associated with him in the field of political economy. This seminar had perhaps the most brilliant group of students, destined later largely to dominate the academic situation in the social disciplines, to be found in the United States in the eighties. The work of a few other men in history should also be mentioned in this period of differentiation and growth. Frederick J. Turner, who received his early training under W. F. Allen, himself an able immigrant from the classics into the social studies, and his graduate training at Johns Hopkins, was added to the Wisconsin staff in 1889. His work in the history of the West amounts to the creation of a new field and a new method which has profoundly affected historiography in this country. E. G. Bourne's work in southwestern history at Yale and the work of McMaster and Thorpe at Pennsylvania indicated new paths of interest in these decades of expansion and differentiation. The literary work of Van Holst, although nominally in constitutional history, should not be neglected, since its departure in the use of informal documents of all types and its emphasis upon the life and action of the people had most important consequences, particularly upon McMaster and Woodrow Wilson. Burgess at Columbia, although primarily interested in political science, had considerable effect upon the development of the study and writing of American constitutional history and the history of reconstruction.

These were the men and the institutions that in the main shaped the development of historical study and teaching before 1890. They were inspired mainly from Germany, although the influence of Hallam, Freeman, Maine, Buckle and Greene in England and of Guizot in France was by no means inconspicuous. In fact no other historians exerted so profound an influence upon the teaching of history in the United States in the nineteenth century as Guizot and Freeman. But the broad, seductive generalizations of Guizot had already lost most of their charm for the more critical historians in the seventies. The famous dictum of Freeman that history is past politics and politics present history then began to take the field and held it until well into the nineties. History meant something much more inclusive to the first

generation of history teachers after the Civil War than it did to the succeeding generation. For them the world of ideas and of political action was in process of profound change, and they were not yet so detached by scholarly isolation that they were not profoundly and personally interested in this change and in its outcome. For the method of Guizot the scholarly German method was substituted, but the themes remained pretty much the same. The serious direct influence of Guizot may be said to have ceased with the publication of White's *History of the Warfare of Science with Theology in Christendom* in 1896. The interest in free political institutions, however, was dominant throughout this period before 1890. The favorite courses in history were constitutional history, and under the influence of the English constitutional historians it was the custom to trace the origins of American constitutional history back to English institutions. The disproportionate emphasis upon constitutional history did not diminish until politics began to differentiate from history in the nineties and particularly after 1900. In the seventies and eighties, under the influence of Freeman and Maine and the German institutional historians, institutional history other than constitutional began to be developed. Henry Adams at Harvard and Herbert B. Adams at Johns Hopkins perhaps best represent this trend. Henry Adams' seminar, consisting of Edward Young, Henry Cabot Lodge and J. Laurence Laughlin, produced as the result of their labors in this field an important piece of work to which they gave the title *Essays in Anglo-Saxon Law* (1876). All of the members of this seminar later became teachers at Harvard. H. B. Adams at Hopkins directed his students largely to the study of education in the South and of local institutions, with the result that a series of monographs of great value was produced. Burgess accomplished a similar work for the period of reconstruction.

The German influence was exerted primarily in the field of method, and it is here that the greatest transformation took place. History became critical in a degree not before achieved in this country, and more and more of the historians' attention was given, especially after the eighties, to the sources and dependability of their data and less to the meaning or interpretation of the facts. In this way history became much more accurate, but also perhaps less satisfying to those who wished to find in it an

explanation and a guide. This increasing technicalism in history was compensated for by some writers and teachers by a greater emphasis upon the value of literary style. This growing interest in method early manifested itself in the organization of historical seminars. The first of these was established in 1869 by C. K. Adams at Michigan and the second by Henry Adams at Harvard in 1871. The most celebrated was that of H. B. Adams at Johns Hopkins. The seminar soon became the accepted method of teaching graduate students, who worked on individual problems in their fields and brought their results to the seminar, where methods and problems of procedure were also discussed. The leader of the seminar might himself work on a special problem or occupy his time with lectures on methodology and sources. Some leaders did both. C. K. Adams' *Manual of Historical Literature* (1882) was obviously the outgrowth of his seminar lectures. Most of the leading teachers and directors of research in history gave some attention to the subject of methodology and bibliography. The finished products of the seminar were in the form of monographs and served usually as Ph.D. theses. Preferably they were integrated about some central theme, as was the case at Harvard, Johns Hopkins and Columbia in the instances mentioned. The field of history itself began early in this period to be differentiated into a number of subdisciplines or ramifications. In almost every institution of considerable size there early arose divisions between American, European and ancient history. To these were added in various institutions such categories as ecclesiastical, constitutional, institutional, economic, modern, intellectual, oriental and social history. Although separate administrative divisions were not usually made for these, sometimes distinct chairs were given some such title as here mentioned. European history especially grew in importance in this period, due largely to increased contacts of American scholars with Europe.

In the field of politics there was not much obvious development or growth in this second period. The subject had as yet scarcely emerged as a separate discipline. Where courses were given they were primarily devoted to constitutional history and constitutional analysis. It was politics as Freeman used the term. At Yale President Woolsey was, however, treating the subject with more academic respect and was offering courses in political theory and, in 1849, international law from the political science

standpoint. In 1860 he published his *Introduction to the Study of International Law* and in 1878 his *Political Science*. He also edited the second edition of the *Political Ethics* and the *Civil Liberty and Self Government* of Francis Lieber in 1874. But the only outstanding collegiate development of political science in this whole period, as distinguished from history to which it was everywhere else subordinated, was at Columbia. Burgess went to Columbia from Amherst, where he had already discovered Mayo-Smith and Munroe Smith whom, in 1876, he had sent from there to Germany for advanced study. But it was not until 1880 that he organized his School of Political Science and gathered into his faculty as his associates Munroe Smith in history and Roman law and Mayo-Smith in social science and political economy, with C. R. Bateman in administrative law and Archibald Alexander in political philosophy. Before 1890 F. J. Goodnow had been added in administrative law, E. R. A. Seligman in political economy, W. A. Dunning in political theory, and H. L. Osgood in history. This was a remarkably strong department, and the work in this field stood out far above that in any other institution in the country at that time. The school bent heavily in the direction of history, as was the custom of the time, each teaching member through the eighties giving at least one course with a historical emphasis. It also included such work, then slight, as was given at Columbia in political economy and social science. The School of Political Science at Columbia became the fostering spirit and largely set the mode for later more extensive developments in history, economics, sociology and anthropology in that institution and many others. Other universities began to give more specific attention to political science soon after 1890. In the early nineties A. B. Hart was giving a course at Harvard on American government in practise, a departure which later led to his work on *Actual Government*, first published in 1903. W. W. Willoughby was added in political science at Johns Hopkins in 1897. The University of Chicago gave some attention to the present aspects of government from the time of its opening in 1892, but development in this subject was slow until after 1900. Goldwin Smith continued his work at Cornell through the nineties, but his interest was primarily in the historical aspects of his subject. Other universities were picking up the thread of a growing interest in actual government and present po-

litical problems, but in 1900 public law and constitutional history were still the dominant emphases in political science in practically every institution of the country and the number of separate departments of political science was exceedingly small. For the most part the subject was still under the wing of history.

Political economy was never as thoroughly under the influence of history as politics, although the titles presented above show that the historical approach was not an infrequent one. The German-trained leaders in this period, especially H. C. Adams, R. T. Ely, Edwin R. A. Seligman, Henry W. Farnam and Simon N. Patten, had a strong historical bias which was shown in their writing and teaching, but perhaps none of these men could be said to be exclusively or even primarily committed to this method. The best efforts of all of them, including even Patten whose major interest was in the theory of welfare, went into the solution of practical economic and social problems. The others did distinguished work on government commissions and influenced important phases of social and economic legislation. Before these men, and other prominent teachers and writers such as Laughlin, Taussig, Seager and Veblen, came to dominate the development of political economy, the contemporary and practical side of economics had been stressed effectively by such men as David A. Wells, Horace White, Edward Atkinson, W. M. Grosvenor, and Francis A. Walker, who were active from 1865 until 1890 or 1900. Walker was statistician, theorist and practical economist. His *The Wages Question* (1876) and *Money* (1878), White's *Money and Banking* (1895), and Wells' *Recent Economic Changes* (1889) were the ripe product of much keen observation in the field of applied economics and exerted great influence. Walker's *Political Economy* (1883) was the legitimate successor of Bowen's and Carey's works and the able competitor of Mill and Marshall. It, more than any other American work, served to bridge the transition from the old classical aprioristic economics to the newer and more inductive factual treatises of Ely, Fetter, Seligman, Seager, Johnson, Taussig and other contemporaneous writers that came to appropriate the field of university instruction about the beginning of the present century. By the time these newer texts were before the public the historical interests of the authors were capable of being compressed into a few introductory chapters, and the statistical approach was in

most cases as strongly emphasized, if not more so, than the historical. By 1890 the historical treatment had been standardized and segregated into economic history, under various titles, such as financial, commercial, tariff and economic history. One of the earlier outstanding writers in this field, especially as it related to finance and industry, was A. S. Bolles of the University of Pennsylvania, author of *Financial History of the United States* in three volumes (1879-86) and *Industrial History of the United States* (1878). Harvard University also early developed this middle ground between history and economics, at first under the leadership of Taussig and later of William Ashley, who became professor of economic history at Harvard in 1892. More recently Harvard has again taken the lead in this general field by emphasizing in the Graduate School of Business Administration the field of business history and by launching the *Journal of Economic and Business History*. At Yale Callender was also a pioneer in the subject of American economic history.

In 1876, according to Laughlin's study, made in 1892, of the teaching of political economy, there were thirty-eight colleges and universities teaching political economy, of which only three colleges offered as many as two courses in the subject, and these in each case consisted of an elementary and an advanced course. In 1892 Michigan was offering twenty courses, Chicago seventeen, Pennsylvania sixteen, Columbia thirteen, Harvard eleven, Wisconsin and Massachusetts Institute of Technology each nine, and Yale, Oberlin and University of Iowa six each. The growth was even more rapid in the following decades. The expansion in subject matter, students and teachers was equally marked. By the end of the century the subdivisions of theory, economic history, money and banking, public finance and taxation, labor, industrial and business organization, and transportation were well developed and various other subdivisions largely of a business character, such as agricultural economics, insurance, credit, factory organization and management, and advertising were in process of being launched. Statistics was a subject much broader, of course, than economics. It is a method applicable to the inductive study of all fields of science, but particularly of the social sciences. We find occasional evidences throughout the century that its possibilities were appealing to the best minds. We have already referred to the work of DeBow. The American Statistical Asso-

ciation was founded in 1839. It fell, however, to the lot of political economy, as the social subject dealing most actively with current phenomena which must be generalized for guidance in practical affairs and policy, to do most in the actual application of this method. The work of Walker was outstanding in this connection, and that of Carroll D. Wright, who divided his attention between economic history and applied sociology and put the Massachusetts and the federal bureaus of labor statistics on a scientific basis, was perhaps even more influential. Wright and Walker made the statistical method a reality in governmental investigation, and they and Mayo-Smith dignified the subject with respectable college standing.

This period of growth and differentiation also gave rise to a number of new social sciences, theoretical and applied. Among these anthropology and sociology were the most striking examples. Although the origins of these two disciplines were not identical, their fields for a long time were closely related and only recently have they come to be fairly well differentiated administratively. Both grew out of a desire to apprehend the meaning of human behavior as a whole and to integrate human relationships rather than to atomize them. As anthropology—earlier called ethnology, because it was commonly believed in the nineteenth century that there could be a science of race on the social side—developed, it was concerned primarily with the data of primitive peoples, and sociology came more and more to deal with the data of advanced peoples. This distinction, at times quite uncertain, has been the main line of cleavage between the two disciplines. Despite the European origins of the concepts of these subjects and the strong early influence of such men as Tylor and Lubbock upon anthropology in this country and of Comte and Spencer upon sociology, both of these subjects had early beginnings in the United States. The slavery controversy appears to have been very important in both cases, and in that of anthropology the Indians—still exercising their traditional customs with but little interference from white civilization—were another important factor. From the thirties to the fifties, when the slavery controversy was at its height, a very considerable literature arose in the lower South, centering around Charleston in particular, dealing with the physical anthropology and ethnology of the Negro. The southern standard periodicals, of which there were then several of

high grade, carried this discussion, and a considerable number of books were published, the more outstanding of these being J. C. Nott's *Two Lectures on the Natural History of the Caucasian and Negro Races* (1844), *Types of Mankind* (1854), *Indigenous Races of the Earth* (1857)—the last two written in collaboration with G. R. Gliddon—John Bachman's *Doctrine of Unity of the Human Race* (1850), Thomas Smyth's *The Unity of the Human Races Proved* (1850), and S. D. Baldwin's *Dominion; or The Unity and Trinity of the Human Race* (1857). These works were often very scholarly, drawing as they did upon the latest European investigations in physical anthropology, but science was also mixed inextricably with appeal to theological authority, with here and there a direct refutation of Biblical authority when it appeared to conflict with the findings of scientific investigators. Nott and Bachman, in particular, were men of learning who made some original studies in the field. The Negro question was, however, settled by war instead of by argument, and the next outstanding work in anthropology was done by L. H. Morgan in connection with his field studies of the Iroquois Indians of New York. His *Ancient Society* (1877) and his *Systems of Consanguinity* (1869) had great influence upon the development of anthropological theory throughout the world, possibly more in Europe than in America. It is now recognized that *Ancient Society* was inadequately inductive, especially in its assumptions of uniformity and universality of culture patterns, but Morgan shares with Tylor the honor of having done more than any other men to lay the foundations of cultural anthropology.

Fortunately for the future inductive development of the subject, the United States Geological Survey became interested in 1876 in studying the archaeology of the Indians and organized an ethnological survey under J. W. Powell. This work grew into the Bureau of American Ethnology, which expanded its interests to embrace the cultural aspects of the subject and resulted in a large number of field studies of great importance. The founding of the American Museum of Natural History (1869) with its close connections with the teaching of anthropology through some of its leading curators, such as Putnam, Boas and Wissler, and the organization of other museums, such as the Field and Peabody, have also contributed greatly to an inductive basis for the subject. As Wissler has pointed out, anthro-

pology was long primarily a museum and field subject instead of a college discipline. Furthermore the earlier stress in college curricula was primarily upon physical anthropology and archaeology, as it was in the museums. The first actual professorship in the subject was established at Harvard under F. W. Putnam in 1885, but it does not appear to have been active before 1887, and thereafter it developed slowly. In 1886 D. G. Brinton became professor of American archaeology and linguistics at Pennsylvania. Even today anthropology has not a very strong foothold in the universities, although it is growing rapidly. Chicago had a professor in the subject (Frederick Starr) from its opening (1892), and courses were given at Columbia from about the same time by W. Z. Ripley and F. H. Giddings, and after 1896 by Franz Boas. Under the stimulus of Stanley Hall, Clark University had been giving instruction in anthropology since the eighties, and Sumner at Yale had instituted courses in the cultural side of anthropology in 1885. But Sumner was a "book" anthropologist, and modern anthropology prides itself on being a field subject with a very accurate technique of description and analysis. Under the influence of Boas, who has dominated the teaching of the subject for a quarter of a century, analysis has been much more important than synthesis, but recently interest in synthesis and in inductive generalization has revived, especially under the leadership of Wissler, Kroeber, Goldenweiser, Tozzer, Dixon and others. Certainly the primary interest is now in cultural anthropology, and increasingly in non-material culture. Already strong departments have been established at Harvard, Chicago, Columbia, Yale and California, and there are few of the larger universities without a chair in the subject.

Perhaps the first treatise on sociology ever written was that by a Mississippian, Henry Hughes, entitled *A Treatise on Sociology, Theoretical and Applied* (1854). In 1854 also George Fitzhugh of Virginia wrote *Sociology for the South; or The Failure of Free Society*. Both of these volumes bear obvious internal indications of a theoretical reaction to Comte, and equally as obviously they reveal the slavery controversy as the immediate occasion for their production. At that time the South was in intimate contact with the main thought currents of the world. But there were also several other sources for the new subject of sociology, which began to appear in the college curricula in the seventies

and had its first outstanding literary formulation in this country in Ward's *Dynamic Sociology* in 1883. Most of these were academic, or at least systematic. Moral philosophy, which was closely related to the early development of politics and political economy, was especially antecedent to sociology. An examination of such a textbook as Combe's *Moral Philosophy* (1840), long popular in this country, or of Wayland's *Elements of Moral Science* (1835), written to replace Paley's *Principles of Moral and Political Philosophy* (1785), or Paley's work itself, reveals the fact that perhaps the larger portions of these works were sociological in fact and principle. It was only a step to the academic detachment of this material and the separate pedagogic organization of it. This step was apparently first taken definitely by Robert Hamilton Bishop at Miami University, where he gave a course in the "Philosophy of Social Relations" from 1834 to 1836. He had been trained at Edinburgh, where he may have been influenced by Chalmers, and had taught at Transylvania before going to Miami. In 1850 W. H. M'Guffey, famous for his Readers, a former associate of Bishop at Miami and then professor of moral philosophy at the University of Virginia, offered a course entitled "Philosophy of Social Relations, or Ethics of Society" and continued it until 1858. As early as 1754, however, the College of Philadelphia gave instruction in "The Ends and Uses of Society," and in 1794 the professor of Greek at Columbia College offered a course in "Humanity," the description of which reads much like the sociology of a hundred years later. The sociological character of much of the content of textbooks on classical and Jewish antiquities has already been mentioned.

But perhaps the most significant antecedent to sociology, after moral philosophy, was a new subject entitled "Social Science." The first work in this field was that by Henry C. Carey, entitled *The Principles of Social Science*, published in three rather rambling and repetitious volumes in 1858-60. Carey's object was to bring together in a single treatise a discussion of the significant factors molding society and social policy. To him these were of course largely economic, but his treatise was much more general and inclusive than a technical treatise in economics. In 1865 the American Social Science Association was organized to promote much the same synthetic viewpoint. In that year also A. L. Perry began to give

instruction in social science in his course in economics at Williams College. In 1868 R. E. Thompson, a disciple of Carey, offered an independent course in social science at Pennsylvania, and other courses were established by Sumner at Yale (1872), Laws at Missouri (1876), Mayo-Smith at Columbia (1878), Dunster at Michigan (1880) and Sanborn at Cornell (1885). Other courses followed, and in some institutions, such as Columbia, Brown and Baylor, the term still persists, although it is generally more inclusive than sociology. It has also become a generic term including all of the social sciences, a result which perhaps its early sponsors consciously desired. Most of these early courses dealt with what we now call social problems, such as race, immigration, divorce, intemperance, labor, education, poverty and crime, but Sumner and Laws used the works of Spencer as reading materials. This departure, in the trail of Spencer, was soon to prove the dominant trend in sociology. Spencer not only contributed the subject matter but he also, following Comte, gave the name which soon displaced that of social science as the specific characterization of this new movement toward a synthetic viewpoint in the generalization of social data. Perhaps this was unfortunate, for it narrowed the field of the data included in the synthesis primarily to that of anthropology.

From the seventies there were a number of more or less synthetic social science trends running largely parallel with each other for nearly two decades, destined about 1890 to unite under the single administrative leadership of sociology, at the time when this subject received academic recognition. These parallel trends were the anthropological sociology of Spencer as taught by Sumner and Laws, and later in a separate course called "Sociology" at Indiana in 1885. Until 1900 this was probably the dominant content of sociology courses. Giddings' early courses show strong traces of it, although he was also much influenced by the demographic work of C. D. Wright and by the French social psychology of the nineties. A second parallel trend was the social problems courses which grew out of the social science courses in the eighties and found final expression especially in the courses on charities and criminology, as represented by Amos G. Warner, F. H. Wines and H. M. Boies, and in the courses on labor, immigration, race and population which appeared in considerable numbers in the nineties and were usually

incorporated with sociology when departments in this subject were organized. The old subject of moral philosophy was transformed in the eighties into ethics, Christian ethics, social ethics and Christian sociology. For the most part the last three were taught in the divinity schools and the first in the new departments of philosophy, but Christian sociology was often found in the denominational colleges in the nineties, and Small began his sociological career from this point of view. Both Ely and Commons dabbled in this field in the nineties, and F. G. Peabody and Graham Taylor largely standardized it in the theological schools in the direction of social problems, later to be known as "Christian Ethics" at Union, Chicago and other seminaries. Peabody introduced it as practical ethics at Harvard in 1881, where now, as social ethics, it still divides the field with sociology. A fourth parallel was the surviving interest in the philosophy of history, which was taken over from history in one form or another by practically all of the leading theoretical sociologists of the nineties, but was gradually eliminated after 1900. As sociology stood in the standard colleges in 1900, it was very largely a synthesis of all of these contributing viewpoints as well as of some minor ones not mentioned. These were not always thoroughly assimilated one to another. They were primarily secular in viewpoint, and gave evidence of a growing interest in the study and inductive generalization of contemporaneous data and a corresponding diminution of interest in anthropological or ethnological materials. These last were now beginning to receive a separate academic integration in the degree to which sociology withdrew its interest and placed it elsewhere.

A number of other subjects, not particularly social in their original subject matter, were integrated more or less to the social disciplines in this period. This was particularly true of education, biology, geography and theology. Law, on the other hand, diminished in its social synthetic outlook during this period. Constantly it became more traditional, technical and formal, emphasizing precedent at the expense of the demands of common sense and social justice. This displacement of justice by formality was variously due to the growing uncertainty of the content of the law arising out of the accumulation of great masses of contradictory decisions; to the conflict between new times and new needs and the old content and procedures of the law; to the impact of economic

interests, desirous of maintaining a status quo or of securing special favors of interpretation, upon the legal profession and judges taken from among the lawyers; to the inertia which a highly integrated and closed system, whether legal, religious or other, is likely to acquire when it insulates itself from a functional philosophy of life and environment; and finally to the over-professionalization of the law and its isolation from the other social disciplines in the colleges. Several men of great ability perceived these evils and sought to remedy them in one way or another. Langdell's case method of teaching the law, introduced at Harvard in 1870, and adopted practically universally in the better law schools by 1900, was calculated to minimize uncertainty and to train in the inductive approach to general principles. Dudley D. Field made a long and earnest fight for codification with the same end in view, especially in the seventies and eighties. About all that was accomplished here, however, was a practical movement in the direction of uniform legislation. Something also was achieved in the direction of the simplification of procedure, in the improvement of the sources of the law, in textbook making and in instruction, and latterly in the movement for social legislation and a more ethical interpretation of evidence and of past decisions. The growth of the historical viewpoint in the law in this period was of undoubted value in stimulating a constructive criticism of legal subject matter and procedure. But at the end of the century not a great deal of progress had yet been made in the direction of an adequate socialization or humanization of the law.

Geography, as we have seen, had always maintained close contacts with the social disciplines in this country. Special textbooks began to appear in geography about 1800, Jedidiah Morse's *American Geography* (1789) and Parish's *New System of Modern Geography* (1810) being the most outstanding. About the middle of the century the subject was extended from the colleges to the public schools so largely that several public school texts of all grades appeared, including among others those by Colton, Cornell, Mitchell, Monteith and Warren. In the seventies, eighties and nineties there was an increasing emphasis upon physiography, perhaps as a result of the spread of geological instruction in the colleges; but, beginning in the eighties and nineties, there was a revival of interest in social or human geography. Pre-

viously social geography had been primarily political, with some emphasis upon anthropogeography, after the tradition of Montesquieu and Buckle. Now the maturing of economics as a subject in the colleges called for a rapid development of economic and commercial geography, which gradually expanded in the direction of a social geography descriptive of the customs and institutions of peoples. This aspect of geography was largely popularized by travel books and by geographical readers such as those by Frank G. Carpenter.

The first volume dealing with education in this country was the Rev. Samuel R. Hall's *Lectures on School-Keeping* (1829). Later in the century several universities introduced courses in the theory and practise of teaching: New York University in 1832, Brown in 1850-55, Michigan in 1860 and the University of Iowa in 1873. Iowa's was the first permanent chair and was called "Philosophy and Education." Other chairs followed: at Michigan, in the science and art of teaching, in 1879; at Wisconsin, in pedagogy, in 1881; and at North Carolina and Johns Hopkins in 1884. Teachers College was incorporated in 1889 and affiliated with Columbia in 1890. In 1920 over four hundred colleges and universities were giving courses in education for prospective teachers. In 1901 Tolman listed six courses in the sociology of education, the forerunner of modern educational sociology, which is now to be found in a very large number of colleges and universities. Furthermore the whole subject matter of education as a discipline is moving toward a social, and even a sociological emphasis, although formerly in this field the psychological emphasis was most prominent, and perhaps still is. In the theological seminary the social emphasis is also growing rapidly, until advanced institutions of this type, like Union and the University of Chicago Divinity School, are becoming largely schools of sociology, anthropology, psychology of religion, religious education and social (Christian) ethics. Ethics in the departments of philosophy is also becoming increasingly social in content.

III. THE PERIOD OF MATURATION AND SYNTHESIS. The growth of the social disciplines has been very marked since 1890. In 1884 there were about twenty full time men of professorial rank teaching history in the colleges. In 1895, according to Jameson, this number had grown to approximately one hun-

dred, almost half of whom had studied in German universities. The recent growth has also been great, but less marked relatively than that of the social sciences. Between 1876 and 1892 (16 years) courses in economics multiplied 5.8 times; between 1892 and 1910 (18 years), 8.6 times; and between 1910 and 1925 (15 years), 4.6 times. The peak of growth in this subject was apparently reached around 1900. Few departments of political science were established independent of history before 1900, those of Wisconsin and Harvard, for example, dating respectively from 1901 and 1909. In 1913 there were 336 colleges and universities, out of a total of 546 for which data were obtained, offering political science, and in thirty-eight of these there were separate departments of political science. In 1889 there were only four institutions offering sociology by name. In 1901 there were 132 institutions with 399 courses. In 1909 the number of collegiate institutions teaching sociology had increased to 337 and the number of courses to 1044, a growth of 155 percent of institutions and of 162 percent of courses in the intervening eight years. Since this period the rate of growth has probably been slower. Between 1865 and 1920 a total of 142 new law schools affiliated with other educational institutions and fifty-four independent law schools were established. Fifty-four of the former type and twenty-four of the latter ceased to operate. In 1925-26 the total number of degree conferring law schools was 168 and the total student attendance upon these was 44,273. In 1897 there were only three distinct chairs in geography, although many more men gave part of their time to the subject. In 1920, 170 colleges and universities offered geography, and in 1924 there were 494 college courses and 15,004 college students in the subject. The majority of the courses dealt primarily with human geography. The growth of other social subjects has already been noted.

Beginning with the nineties of the last century, and especially after 1900, new trends became manifest in the social disciplines. The period of experimentation in the selection of a workable method was drawing to a close, and the various fields settled down to productive work largely to the exclusion of methodological discussions. Another important trend, especially after 1900, has been that toward synthesis. The border lines between the social disciplines began to disappear and overlappings became more numerous. The problem of jurisdiction,

so absorbing in the nineties, has ceased to concern the investigator and student in any vital manner and is being left more and more to the administrator. The result is that all of the social disciplines have come to be largely synthetic, as was sociology in the last quarter of the nineteenth century. Also, there has been a marked increase of emphasis upon contemporaneous data as the subject matter of investigation in the social disciplines. This is indicative of the growing emphasis upon the use of science to interpret the world in which we live. In a static world tradition is perhaps the best interpreter, but in a highly dynamic world, like ours, contemporaneous facts and generalizations from them are necessary to give perspective and to make clear our adjustment needs. Other trends are toward practicality and the application of facts to problems, toward a growing emphasis upon professionalization and the training of experts in the social sciences, and likewise toward an increasing importance assigned to the social subjects not only in the college curricula but also in public opinion and behavior as a whole. Finally there has been a vast corresponding increase in investigation and publication, especially in recent years. All of this indicates that the social disciplines are now reaching that degree of maturity which will permit them to be characterized as sciences, and in their professionalized aspects as applied sciences.

The central phase of this struggle to become sciences has been to develop a dependable method of gathering and generalizing data. At the beginning of the nineteenth century the social disciplines, with the partial exception of law and history, were primarily social philosophies. Even in law philosophic speculation was frequently mixed with deductions from precedent and categorical dicta. Law was largely authoritarian and to a nominal degree scientific. History also largely depended upon authority for its facts and not infrequently interpreted these with an *a priori* laxity that called forth the strong disapproval of the critical historical school, whose primary concern it was to develop a method of finding and testing historical facts. Beyond the collection and evaluation of data the historians were not at first concerned. Political economy and politics were not insensitive to objective data, but the work of the classical economists and of the political philosophers gives abundant evidences that generalizations did not always await the accumulation

of large masses of verified data. Moral philosophy was professedly speculative, although it did not go so far in the disregard of observation in its preference for *a priori* logic as had its predecessor, the natural law school of philosophy. These conditions could not well have been otherwise in the first half of the nineteenth century. There had not yet been developed an inductive method for the social sciences, although the philosophers of history had attempted it and Comte and others had written about it. The leaders of the social disciplines after 1865, and especially those who had been to Germany, saw the weaknesses of the speculative approach and of the pseudo-inductive method of the philosophy of history school. To many of them it seemed that the remedy lay in the application of the critical methods of history to the other social disciplines, and for some three decades this was attempted, with the results noted in the preceding section. They did get valuable perspectives upon the origin and growth of their problems, but in a rapidly changing world such historical perspectives are inadequate guides to the present and the future. Above all, the historical method, however well tested the facts may be, does not give an adequate basis for generalizing regarding the present. In very few fields are there sufficient comparable data to afford a dependable sample for statistical generalization, and reasoning by analogy is particularly dangerous with respect to historical data, because each period of history involves different conditioning factors. The historians themselves realized this limitation and largely abstained from generalization. But the social sciences cannot be so abstemious if they are to be sciences rather than history.

The use of anthropological data for generalization, which appealed so strongly to Spencer and to Americans like Morgan, Sumner, Veblen and most of the early sociologists, proved of little more value. While these data were not taken from such a wide range of historical periods, they were abstracted from a vast number of space environments. This fact gave the anthropological or ethnological data almost as great a diversity of meaning as the dissimilarity of the time environments gave to historical data. If the anthropological data had any superiority as bases for social science generalizations it was largely due to the fact that the samples in any one field were usually more numerous. Driven largely to abandon

both of these attempts at securing an inductive basis for the social disciplines, the leaders turned with more success to the statistical method, the virtues of which had been more or less recognized throughout the century. The thing most needful in connection with this method was an abundance of facts capable of being used as samples. In vital statistics the problem of collection was solved gradually by governmental agencies. Business also was able to assemble certain types of data necessary to statistical generalization. But in some other fields the problem was not so easily solved and had to await the appearance of private endowments for the encouragement of research. Various governmental bureaus and divisions, and especially the census, have also shown a disposition in recent decades to recognize the nature of the problem involved. On the other hand, the problem of developing statistical methods, as distinguished from the collection of data to be handled statistically, is largely the task of the scholar and the methodologist. It is his task also to work out the technique of the collection and classification of data. In this connection the case method has come recently to have an increased importance. The case study has two functions. As description and analysis of a specific situation or problem it is a very old technique, known to history, medicine, law and many other fields, and it has recently been elaborated and perfected on this side into the survey, the life history, family history, etc. But there is also another function for the case analysis, that of definition and standardization of data to be used as materials for statistical generalization. The case analysis itself gives only a specific description. It can be utilized as a means to a more general and inclusive perspective only by subjecting it or its defined and standardized elements to statistical manipulation and generalization. The one method gives concreteness and the other perspective. Both are being rapidly perfected by the social sciences.

One of the most marked present trends is toward synthesis and accommodation in the social disciplines. In the nineties many leaders spoke and wrote as if they believed that the boundaries of the social subjects had been predetermined from the foundation of the world. It is doubtful if any one would do that now. The problem is the important thing today, and it is regarded as the property of any person or department that is competent or

equipped to handle it. Each of the social subjects now takes material from the others quite freely. There is no copyright on facts, but only on the organization or use made of the facts. The same intellectual need for perspective and reasonable completeness of view which brought sociology into existence is now bringing all of the social studies into a more harmonious cooperation and adjustment. The present emphases upon contemporaneity and functionality have had much to do with this synthetic trend. In a century history has completely reversed its major emphasis from ancient to modern, and even to current or contemporaneous, history. And at the same time it has expanded the range of its subject matter from politics to include all phases of human action and thought. Its content is no longer merely past politics but it includes all past social subjects. The only distinctions left between history and the other social disciplines are that it covers more than just the data of social relationships and relates to the past instead of the present. But as history comes more to emphasize the contemporaneous and resumes its old habit of generalizing, even this major distinction largely disappears.

Nor is one social science able longer to build up its data and principles without giving due regard to those of the other social disciplines. This is particularly noticeable in connection with law and religion, although excellent examples might also be taken from economics, political science or sociology, not to mention other subjects. Sociology has been compelled to give due cognizance to economic and other cultural factors in developing its findings. Economics is today in process of reorientation toward an institutional economics, because of the necessity of recognizing the findings of social psychology, sociology, politics and anthropology. Political science within two or three decades has, under the spur of economic and sociological analysis, turned from the formal analysis and history of constitutions to the study of governmental and political practises. It was E. J. James of Pennsylvania who first, in the late eighties, struck the modern practical note in political science. A. B. Hart followed at Harvard in the early nineties. His *Actual Government* (1903) has since been supplemented by many other studies, such as the works of Lowell, Beard, Brooks, Munro, Merriam, Young and Holcombe, going much farther in the same general direction. The work of Beard has been particularly outstanding for its recog-

dition of the influence of the economic factor as a psycho-social background to political motivation and action. This has also been emphasized by Merriam and his school at Chicago, and in addition this school has undertaken with success to analyze the various social and economic currents which condition public opinion. Political psychology, as a phase of social psychology, is a recognized and important phase of the science of politics in every progressive school, and it is even more a part of the general literature of the subject.

On the practical side political science has increasingly turned its attention to problems of administration and control. Goodnow and Fairlie, especially, have emphasized repeatedly in the last three decades the importance of administration, and the newer tendency in this field is to discover the practical material and psycho-social obstacles and aids to successful governmental administration. International law, once a matter largely of logic, and later of history and formal documents, has now come to be more particularly an analysis, on the one hand, of international practises and relations, including informal diplomacy, and on the other, of international opinion and affairs (primarily economic). Publication in this field is moving in the same direction. In all of the social subjects the emphasis is increasingly upon the analysis of the informal backgrounds and conditioning factors, for it is recognized that the formal relations and facts but imperfectly represent the actual situation and are usually results rather than causes. Thus economic, social and psychical factors are often of more significance as explanatory categories than is mere logic. This fact has brought the new science of social psychology into existence and has made it largely basic to all of the other social disciplines. In the new orientation of the social disciplines toward contemporaneity and synthesis it has largely taken the place of formal logic as an aid to the explanation of social processes.

Sociology and anthropology also have been greatly influenced by the other social studies. Being largely a synthetic discipline, sociology has been under the necessity of collecting for itself a body of dependable data. These have been borrowed largely from history, economics, political science, anthropology, psychology and biology. This fact has resulted in the establishment of numerous filiations between sociology and the other social subjects, which have not

infrequently eventuated into new connecting social disciplines, such as social biology, social history, social economics, social politics, social or cultural anthropology and social psychology. Thus the synthetic and largely derivative character of sociology, for which it was formerly much blamed, has proved to be one of its strongest points, enabling it to perform largely the function of filling out the unoccupied spaces between the social disciplines and thus to synthesize their methods and viewpoints. But sociology has not been alone in this work. The other social disciplines have also been active in pushing out their borders to make contacts with the other disciplines. Likewise anthropology has moved largely in the direction of sociology on the side of interpretation of its data. The result is an interesting rapprochement between the two subjects after almost a generation of increasing separation. Sociology is again drawing considerable data from the field of anthropology and is incorporating it as cultural sociology. Anthropology, on the other hand, in generalizing its cultural data finds it difficult to avoid becoming cultural sociology. The new relations between the two disciplines present an interesting academic problem in the scope of the various social sciences.

Recently law has been undergoing an evolution in the direction of a synthetic viewpoint. The historical approach to law gradually emancipated it from the condition of a closed system and demonstrated the relativity of its principles, based so largely on tradition. This made it necessary for students of law to find some sanction for it other than that of precedent. In earlier times the continental legal systems sought this wider sanction in the principles of natural law, which reduced essentially to intuitional and *a priori* judgments of justice. A similar appeal to an ethical philosophy of law was made by some of the critics of our own legal system in the second half of the nineteenth century. But it remained for a group of men who had caught the new synthetic spirit in the social sciences to see that the new sanctions of the law must be found in science instead of in philosophy. Roscoe Pound has been the leader in this reorientation of the law, which he has called the sociological theory of jurisprudence. He attributes the inspiration of his theories in large measure to his contacts with George E. Howard, E. A. Ross and A. W. Small, but the general trend of the time toward synthesis has also been largely responsible for this new

humanistic emphasis in law. As the result of a long campaign through articles, books, addresses and especially his teaching in the very influential Harvard Law School, Dean Pound has been able to popularize this viewpoint in his own generation. Harvard has furnished a very large number of the law teachers of other universities, and practically all of the recent Harvard law men are enthusiastic promulgators of the sociological theory of jurisprudence. The central conception of the theory is that law is an instrument for the better adjustment of human relations of whatever character, traditionally called into requisition when these relationships become unbearably pathological, but perhaps also to be used constructively and preventively with discrimination. Thus law is increasingly regarded as a public service rather than as merely a source of private profit. It is also recognized that law can satisfactorily perform its function of securing a normal adjustment only if it takes adequate cognizance of the social and personal factors involved in the situation, which means that the lawyer as well as the law must become increasingly informed and molded by the other sciences, and especially by the social sciences. This is essentially the synthetic viewpoint.

This viewpoint in law has made considerable headway in its academic form at Harvard, Columbia, Yale and Northwestern, and perhaps at some other institutions. Harvard has become noted for its studies in the social aspects of law. Since 1928 the Columbia Law School has been engaged in such studies as familial law (undertaken jointly by a lawyer and a sociologist), recent trends in corporate law, the psychological and logical foundations of the rules of evidence in Anglo-American law, research in the field of commercial bank credit, the administration of prosecutions in American cities and methods of formal accusation in criminal prosecutions. Thus law is making contacts with all of the social sciences. Concerning the new Institute of Human Relations at Yale, so far as it applies to law, President Hutchins of the University of Chicago and formerly dean of the Yale Law School, says: "In planning the institute we have had constantly in mind the need for the cooperation of lawyers and social scientists in the study of the group aspects of human behavior. . . . The attempt in the institute will be to study the rules of law in relation to life as it is being lived in the United States today, in the light of all the data that economists,

political scientists, psychologists and psychiatrists can bring to bear upon them." What the Yale Institute of Human Relations is expected to do for law it will also attempt to do for medicine, business, politics, etc. Nothing could be more typical of the new synthetic spirit in the social sciences than that exhibited by this new research institute at Yale. So far, however, this new sociological and humanistic jurisprudence is primarily in the research and publicity stage. It will be perhaps a generation or more before it actually transforms the teaching and the practise and the making of the law.

The trend toward professionalization in the social disciplines, noted earlier in the case of law, also began in earnest for political economy, or economics, before the close of the nineteenth century. The industrial system had reached such a degree of complexity and of perfection of technique that it was calling for experts. The Wharton School of Finance and Economy (now Finance and Commerce) of the University of Pennsylvania was the first to respond to this demand, in 1881, following the short-lived attempt at the University of Louisiana in 1849-53. Other schools of similar nature followed. The first of the state universities to institute a school of commerce of university grade was the Louisiana State University in 1899. The period after 1910 was especially prolific in the development of schools of commerce and business administration. Marshall found that 175 schools or courses (curricula) in business administration were established between 1910 and 1925. The courses in these schools have multiplied at a very rapid rate and cover a great variety of subjects, from commercial geography to factory management and air transportation. Most of these schools aim primarily at training in commercial and business technique with a fundamental informational background, but a few, of which the Harvard Graduate School of Business Administration is the most outstanding example, are interested largely or primarily in research and in a fundamental analysis of the subject matter. The field of education has also been professionalized in much the same way. In the nineties the normal schools began to become primarily institutions for the training of teachers in the technique of teaching, and soon after 1900 most of the larger universities established schools or colleges of education to carry on the same training work for the higher grade of

teachers. Later the colleges adopted the same system in so far as they were able, until now over four hundred institutions have professionalized courses for the training of teachers. The subjects thus professionalized are chiefly psychology, sociology, biology and the common school branches.

Sociology, psychology, biology and to some extent other social sciences have also been professionalized in the schools of social work. The beginnings of this movement go back to the American Social Science Association, founded in 1865 to promote the study of the social sciences and especially their application to social problems. This association furthered the organization of the National Prison Association (1870) and the National Conference of Charities and Correction (1879). This latter organization was also instrumental in the promotion of social work training. Dunster's and Sanborn's courses in social science at Michigan and Cornell in the eighties began such instruction, but largely in a theoretical way. In 1894 Ely at Wisconsin and P. W. Ayres, secretary of the Cincinnati Associated Charities, promoted a combined theory and field training scheme, but this was given up the following year. In 1898 Ayres was more successful in starting a six weeks training course for social workers through the New York Charity Organization Society. This gradually grew into the New York School of Philanthropy. In 1899 S. M. Lindsay and S. N. Patten of Pennsylvania initiated a training course within the university. Within the next decade training schools were established at Boston in connection with Simmons College and Harvard University, and at St. Louis. Thereafter the growth was more rapid, until in 1928 there were thirty-five schools of social work of college grade in the United States and Canada, thirty of which were affiliated with, or were integral parts of, universities. There was also a much larger number of colleges and universities offering part time training in social work. Professional training in political science subjects has not reached the same degree of separate development as in business and social work, although in some schools, like the Wharton at Pennsylvania, training of an effective character, especially in consular service and municipal administration, has been developed. The chief reason for the underdevelopment of professional training in political science is perhaps the "political" character of our governmental system. Journalism

has had a much larger development as a professional or vocational subject, but its trend has been primarily technological and very little toward the synthetic viewpoint of the social sciences.

The increased professionalization of the social sciences in response to the demand for technical training of various types of experts has raised some serious problems about the future of the social disciplines. Having in mind perhaps the effect of professionalization upon law, many have feared that the spread of the movement would lead to a decrease in attention to the theoretical aspects of the social sciences. This is not, perhaps, as imminent a danger as that the findings of social investigation may be perverted in behalf of the interests of the new professions and of their commercial patrons. As yet it is not possible to predict ultimate results along these lines. More optimistic social scientists point to the stimulus which industry gave to the physical and biological sciences, claiming that the same result will follow in the case of the social sciences. There is, however, a different factor involved in connection with the social sciences—the fact that they are with difficulty protected from prejudice and propaganda. For example, will the profession of advertising not only make use of the data of psychology and sociology, but also attempt through propaganda to pervert the findings of these subjects with regard to the social significance of the products or commodities advertised? Another contingency often urged is that the overemphasis of the private business man's point of view, especially in business economics, which is developed primarily in the service of private entrepreneurs, may lead to the magnification of an individualistic viewpoint and practically to the suppression of the social or public viewpoint in economics. There also seems to be some danger that the technique of administration may crowd out an adequate consideration of the wider aspects of social policy in social work and in public administration. It is always characteristic of the professional training school that it has little time for "theory" due to the heavy load of "practical" courses, and thus its technique, like that of the law, becomes an end in itself, a ritual, not subjected to criticism from within. One attempt to meet this difficulty has been the elevation of the professional schools into graduate and semi-graduate status, with the requirement of a general non-technical course as prerequisite to matriculation. This

solution is largely invalidated in many institutions by the fact that the withdrawal of most of the social disciplines into professional schools has resulted largely in returning the control of the colleges of liberal arts to the more reactionary subjects, which impose so many "requirements" that, as at the University of North Carolina, it is impossible to elect more than a smattering of the social sciences. At the University of Minnesota, for example, in 1920 a rule was passed requiring students of the prelegal course to take Latin, but giving them no opportunity to elect psychology or sociology.

We have already seen that research in the field of history was not unknown in colonial times. In the national period before 1860 a number of men, including Sparks, Clarke and Force, were able to interest the federal government in doing something toward the preservation of important documents and the publication of *Diplomatic Correspondence* (1829-30) by Sparks and *American Archives* (1837-53) by Force, and other works. We have already noted the leading histories and other writings of this early period, some of them representing trustworthy research. After 1865 the various state historical societies, especially those of Wisconsin and Massachusetts, sponsored important historical investigations. The work of Justin Winsor and R. G. Thwaites in connection with the former merits especial mention. The United States government also made collections of the Civil War records, and began to publish valuable researches in American ethnology and archaeology after 1879. The Massachusetts Bureau of Labor Statistics and the United States Bureau of Labor, the Federal Census Bureau and other governmental research and publication bureaus did increasingly important work of a social science character, especially in statistics, after the eighties. Gradually similar state bureaus fell in line and added their quota to research and publication. Especially since 1900 there has been a large expansion and a considerable improvement in the quality of the social research undertaken by federal and state departments, such as the immigration, children's, women's, agricultural, commerce, education and public health agencies. These have come increasingly under the direction of men trained in research by the universities. But governmental research in the social sciences is likely to be cast along rather general lines, with an eye to popular rather than professional consumption. It is rarely pathfinding. This latter need has been

filled by the universities as adequately as their resources would permit.

Starting in the seventies with the monographs of graduate students and the work of a few professors, usually German trained and especially interested in research, the universities expanded their research programs as their funds increased, until they came to include research fellowships and assistantships, research professorships, laboratories and publications. Chicago is now building a million dollar research laboratory for the social sciences alone and publishes more than a dozen research periodicals. Yale has just received a \$7,500,000 endowment for a research institute for the study of human relations. Columbia, Harvard and Johns Hopkins have long maintained excellent series of research publications, which several other universities have imitated in the last two or three decades. There are also almost a score of university presses designed particularly to publish research work that the commercial publishers find unprofitable or difficult to handle. Aside from these channels for research publication the various social sciences have their national professional associations, which publish journals and usually have an official annual publication besides. The Archaeological Institute of America was organized in 1879, the American Historical Association in 1884, the American Economic Association in 1885, the American Folk-Lore Society in 1888, the American Anthropological Association in 1902, the American Political Science Association in 1903, the American Sociological Society in 1905, the American Association for Labor Legislation in 1906, the American Farm Economic Association in 1909 and various other social science associations of national and local scope at earlier and later dates. According to *Bulletin No. 8* of the American Council of Learned Societies (1928), anthropology now has four standard journals, archaeology four, economics eleven, geography five, history sixty, international law and relations two, law forty-three, political science six, religion seven and sociology nine. Libraries and museums have also multiplied. Every large city in the United States now has a library supplied with hundreds of thousands of volumes, and a few of these with more than a million books. There are also forty-one university libraries possessing more than 100,000 volumes each; the libraries of California, Chicago, Cornell, Illinois, Michigan, Minnesota, Pennsylvania and Princeton have

each more than 500,000 volumes; Columbia has more than a million books, Yale approximately two million and Harvard almost three million. Working museums are practically as numerous. In addition to these agencies of research and publication various private associations and foundations, too numerous to mention in detail here but described at length by Ogg (1928), have been established since 1900. As Ogg says, we no longer suffer from a paucity of research. Our next concern is with its quality, which perhaps is as good as can be expected at the present stage of development. Another problem, which belongs less to pure science than to the applied sciences of education and administration, is that of procuring as wide a dissemination as possible of this research among the masses and its application to the solution of our social adjustment problems. There are also important problems connected with the administration of research funds and of research itself which must be worked out before research can achieve its maximum results.

The control and formulation of the social disciplines, as well as of publication, has come in recent decades to be overwhelmingly in the hands of the universities. This fact renders the organization of the universities and the relations of teachers and researchers to the institutions matters of great public moment. Salaries are probably fairly adequate at the present time, being sufficiently low to place more of a premium upon work than upon golf and social life, and not sufficiently low actually to prevent productive labor. Also, the spirit in most American universities is decidedly favorable to productive labor instead of to brilliant conversation and elegant leisure. The matter of academic freedom perhaps leaves more to be desired. Historically there have been two great obstacles to academic freedom in this country—theological and politico-economic irregularity. Cooper, one of the ablest scholars of the first half of the nineteenth century, was forced to resign from the College of South Carolina in 1834 because he would not accept the Pentateuch. His heresy so frightened the good people everywhere that a large number of denominational colleges were established during the next two decades to compete with the state universities, and they succeeded in keeping the latter on the verge of starvation by denying them state appropriations until the new era in education in the eighties and the nineties gave them a fresh lease on life. Few professors out-

side of denominational colleges and theological seminaries are now dismissed on theological grounds, and then usually with great reluctance. Some of the more advanced seminaries even, such as Union and Chicago, now refuse to dismiss a professor on merely doctrinal grounds. Religion has come to be something more than theology and along with its socialization it has achieved a certain degree of tolerance.

On the other hand, political and economic limitations upon freedom of teaching and expression appear to have tightened. Even Jefferson felt it desirable to choose a "regular" professor of politics for his University of Virginia and carefully to supervise the political reading matter of the courses in this field. It would be impossible to include here a list of the men who have been dismissed from their academic positions because of their political and economic views in the last fifty years, but the following are rather typical. Repeatedly the protectionists attempted to oust Sumner from Yale and almost worried him into a resignation in 1880 on the charge of using Spencer's work on sociology as a text. In 1886 H. C. Adams was forced to leave Cornell at the instance of Henry Sage, who had been offended by the former's remarks on the Gould strike. In 1894 Ely was up before the trustees at Wisconsin on the charge of radicalism. In 1895 E. W. Bemis resigned from Chicago, stating that his economic views made the step necessary. The resignation of E. Benjamin Andrews from Brown in 1897 and his transfer to Nebraska in 1898 are well known, as is also the dismissal of E. A. Ross from Stanford in 1899, because of his views on the immigration question. In 1911 E. M. Banks was forced to resign at Florida because of his too liberal views with reference to the North. In 1917 William Schaper was dismissed at Minnesota after a controversy with a British subject teaching in his department (political science), and the daily papers announced soon after the close of the war that the governor of the state would, in the future attend the sessions of the board of university regents to make sure that no undesirable radicals were appointed on the faculty. These instances are perhaps typical of the present trend. University administrations avoid the dismissal of men on direct political and economic grounds when possible, since such action brings unfavorable publicity and results in their institutions being boycotted by the ablest individuals. Men are much more frequently forced

out by a denial of advancement, of research funds and other aids to effective work, and by administrative discourtesy. It is impossible to estimate the number of men who are eliminated in this way, but it is unquestionably large. The Association of American University Professors has not been able to solve the problem of academic freedom, although it has ameliorated conditions. A greater need is that of an intelligent public opinion which will support the social scientist in stating his findings when they have been arrived at by scientific methods.

L. L. BERNARD

Consult: American Masters of Social Science, ed. by H. W. Odum (New York 1927); James, E. J., "Das Studium der Staatswissenschaften in Amerika" in *Jahrbücher für Nationalökonomie und Statistik*, n. s. vol. vii (1883) 62-87; Walther, Andreas, *Soziologie und Sozialwissenschaften in Amerika und ihre Bedeutung für die Pädagogik* (Karlsruhe 1927); Veblen, T. B., *The Higher Learning in America* (New York 1918); Cubberley, E. P., *The History of Education* (Boston 1920); Ogg, F. A., *Research in the Humanistic and Social Sciences*, a report to the American Council of Learned Societies Devoted to Humanistic Studies (New York 1928); *The Fundamental Objectives and Methods of Research in the Social Sciences*, ed. by Wilson Gee (New York 1929); Jameson, J. F., *The History of Historical Writing in America* (Boston 1891); Bassett, J. S., *The Middle Group of American Historians* (New York 1917); *Methods of Teaching History*, ed. by G. Stanley Hall (2nd ed. Boston 1902); Adams, H. B., *The Study of History in American Colleges and Universities* (Washington 1887); "The Study of History in Schools," report by the Committee of Seven to the American Historical Association, *Annual Report 1898* (Washington 1899) 427-564; American Political Science Association, Committee on Instruction, *The Teaching of Government* (New York 1916); Dryer, C. R., "A Century of Geographical Education in the United States" in Association of American Geographers, *Annals*, vol. xiv (1924) 117-49; Tolman, F. L., "The Study of Sociology in Institutions of Learning in the United States" in *American Journal of Sociology*, vol. vii (1901-02) 797-838, vol. viii (1902-03) 85-121, 251-72, 531-58; Small, A. W., "Fifty Years of Sociology in the United States" in *American Journal of Sociology*, vol. xxi (1915-16) 721-864; Bernard, L. L., "The Teaching of Sociology

in the United States" in *American Journal of Sociology*, vol. xv (1909-10) 164-213, and "The Teaching of Sociology in Southern Colleges and Universities" in *American Journal of Sociology*, vol. xxiii (1917-18) 491-515, and "Some Historical and Recent Trends of Sociology in the United States" in *Southwestern Political and Social Science Quarterly*, vol. ix (1928-29) 264-93; *Trends in American Sociology*, ed. by G. A. Lundberg (New York 1929); Seligman, E. R. A., "The Early Teaching of Economics in the United States" in *Economic Essays Contributed in Honor of John Bates Clark* (New York 1927) p. 283-320; Dunbar, C. F., "Economic Science in America 1776-1876" in *North American Review*, vol. cxxii (1876) 124-54; Leslie, T. E. Cliffe, "Political Economy in the United States" in *Fortnightly Review*, n. s. vol. xxviii (1880) 488-509; Laughlin, J. Lawrence, "The Study of Political Economy in the United States" in *Journal of Political Economy*, vol. i (1892-93) 1-19, 143-51; Farnam, Henry W., "Deutsch-Amerikanische Beziehungen in der Volkswirtschaftslehre" in *Die Entwicklung der deutschen Volkswirtschaftslehre im neunzehnten Jahrhundert*, 2 vols. (Leipzig 1908) vol. i, no. xviii; "Anniversary Meeting" in American Economic Association, *Publications*, 3rd series, vol. xi (1910) 46-111; Marshall, L. C., "The Teaching of Economics in the United States" in *Journal of Political Economy*, vol. xix (1911) 760-89, and "Offerings in Economics in 1925-26" in *Journal of Political Economy*, vol. xxxv (1927) 573-612; Mathews, Shailer, "The Development of Social Christianity in America during the Past Twenty-Five Years" in *Journal of Religion*, vol. vii (1927) 376-86; Gras, N. S. B., "The Present Condition of Economic History" in *Quarterly Journal of Economics*, vol. xxxiv (1919-20) 209-24, and "The Rise and Development of Economic History" in *Economic History Review*, vol. i (1927) 12-34; Wright, Carroll D., "Statistics in Colleges" in American Economic Association, *Publications*, vol. iii (1889) 5-28; Glover, J. W., "Statistical Teaching in American Colleges and Universities" in American Statistical Association, *Journal*, vol. xxi (1926) 419-24; Warren, Charles, *A History of the American Bar* (Boston 1911); Redlich, Josef, *The Common Law and the Case Method in American University Law Schools*, a report to the Carnegie Foundation for the Advancement of Teaching, Bulletin no. 8 (New York 1914); Reed, A. Z., *Training for the Public Profession of Law* (New York 1921), and *Present-Day Law Schools* (New York 1928); Steiner, J. F., *Education for Social Work* (Chicago 1921); Walker, S. H., *Social Work and Training of Social Workers* (Chapel Hill 1928).

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AARONSON, AARON (1876-1919), Palestinian agricultural pioneer and Zionist leader. An agronomist of international reputation, he obtained the collaboration of the United States Department of Agriculture in establishing in Palestine an agricultural experiment station patterned after similar American institutions, and was an active promoter of Jewish colonization in that country before the war. He saw great possibilities in the agricultural development of Palestine, and considered an agriculture diversified and adapted to the local climatic and economic conditions an essential factor in the permanent success of colonization.

The outbreak of the war put an end to his agricultural work, and after an adventurous escape from the Turkish lines Aaronson transferred his activities to helping the British win Palestine and to obtaining political recognition for the Zionist cause. He took part in the negotiations with Balfour which resulted in the famous declaration promising "Palestine as a home land for the Jews," and was a member of the Weizmann commission which went to Palestine in 1918. The restoration of peace found him making plans for putting in new crops and starting a new agriculture on a quarter of a million acres in Palestine, when suddenly his career was cut short by death in an aeroplane accident as he was flying from London to Paris.

DAVID FAIRCHILD

Consult: Fairchild, David, "The Dramatic Career of Two Plantmen" in *Journal of Heredity*, vol. x (1919) 276-80; Ormsby-Gore, W., "Aaron Aaronson" in *Zionist Review*, vol. iii (1919) 35-36.

AARUM, PETTER THORVALD (1867-1926), Norwegian economist, held several administrative positions and, after 1917, was professor of economics at the university in Oslo. His earliest writings dealt with cooperation. In his chief work *Arbeidets økonomiske værdi* (The Economic Value of Labor), published in Christiania in 1908, he follows closely the theory of marginal productivity. Developing wholly deductively the laws regarding the deter-

mination of wages in a static community, he does not enter into any discussion of the applicability of these laws to real life. Aarum revised the second edition of Aschehoug's large work on economics and in his later years wrote an economics textbook, *Læren om samfundets økonomi* (2 vols., Oslo 1924-28), the second part of which treats of the practical side of the science. This part was, however, not published until after his death, and was completed by Oskar Jaeger and Ingvar Wedervang. Aarum was the first opponent of the inflation of Norwegian currency during the war, but was not so fortunate as to win the support of the politicians. With the exception of a short article on Scandinavian economists in *Die Wirtschaftstheorie der Gegenwart* (4 vols., Vienna 1927-28, vol. i, p. 122-41) all Aarum's works are published in Norwegian.

WILHELM KEILHAU

AASEN, IVAR ANDREAS (1813-96), grammarian, folklorist and lexicographer, was born on a farm in western Norway and was largely self-educated. He showed from the first a keen interest in grammar, not only in Latin and Greek but also in the modern Scandinavian and in the dialects of Norway. He was one of the first to maintain that the local dialects of Norway were not debased and corrupted forms of Norwegian but had a continuous linguistic development from Old Norse which could be traced through recognized linguistic processes. Through the generosity of the Academy of Sciences of Trondhjem he was able to travel through Norway, particularly western Norway, gathering material in substantiation of his theory. The result of this was the *Landsmaal*, a very careful synthesis of those dialects which were recognized as purely Norwegian, and the publication of a grammar in 1848 (*Det norske Folkesprogs Grammatik*, expanded in 1864 as *Norske Grammatik*), followed by a dictionary in 1850 (*Ordbog over det norsk Folkesprog*; enlarged edition *Norsk Ordbog*, 1873). Aasen also showed the literary value of the new language in poems and stories (*Ervingen* and *Symra*).

Aasen is of great importance in the history of Norwegian nationalism. The *Landsmaal* became a cause which attracted many vigorous champions, who were quick to recognize Aasen's claim for it as the way to the development of nationality and the spread of popular education. Foremost among these were Arne Garborg, the realistic novelist and dramatist, and Aasmund Vinje, the journalist, and they became the leaders with Aasen in the long and bitter fight against the *Riksmål* (Danish with a Norwegian pronunciation) which had become the "Norwegian" language. This struggle had as its first victory the decree of the Storting in 1896 that *Landsmaal* was to be taught all children in the grade schools, and today it enjoys equal rights with the *Riksmål*. The struggle (*maalstræev*) has heightened the appreciation of the cultural value of the old Norwegian folksongs, traditions and customs, and has had a profound effect on popular education. It has raised the self-respect of the country people as perpetrators of the native Norwegian culture and has strengthened the whole nation's love for everything of pure national origin.

OTTAR TINGLUM

Works: *Udvalgte Skrifter* (Christiania 1896).

Consult: Garborg, A., Hovden, A., and Koht, H., *Ivar Aasen, Granskaren, Maalreisaren, Diktaren* (Christiania 1913); Moe, Molkte, "Ivar Aasen" in *Nordmaend i det 19de Aarhundrede*, ed. by Gerhard Gran, 3 vols. (Christiania 1914) vol. ii, p. 277-326; Bugge, A., and others, *Norges Historie*, 6 vols. (Christiania 1909-17) vol. vi, pt. i, sect. ii.

ABANDONMENT. *See* EXPOSURE; OLD AGE.

ABBE, ERNST (1840-1905), model employer, the son of a spinning-mill foreman. He understood in youth the hardship of a fourteen to sixteen-hour working day, and accordingly when he was an employer he could see matters through the eyes of the employed. He studied physics and became an outstanding figure in the field of optics. In the Zeiss plant at Jena, which manufactured optical instruments and employed fifteen hundred persons, he became partner and later sole owner, and introduced model working regulations. He converted it into a foundation in 1896, thus expropriating himself without compensation. Although politically a liberal he advocated restriction of the power of the employer and improvement in the legal status of the worker. He opposed welfare work as mere stage trappings. "Welfare" firms required compulsory contributions

to pension funds which, through fear of loss on discharge, increased the dependence of the employed, but Abbe established a non-contributory pension fund and even introduced a system of compensation to employees discharged through no fault of their own. He also committed his concern to a system of profit sharing (which excluded the management) and to consultation with a freely elected labor committee on all labor questions except those concerning commercial management. In 1900 he proposed to this committee that the hours of labor, which had been gradually reduced to nine, be cut to eight. The workmen agreed and tried to accomplish just as much as before, but then declared the strain too great. By Abbe's orders the former pace was resumed, and it was found that without conscious effort more work was done than formerly in a nine-hour day. This led him to his famous theory of the reduction of working hours for specialized factory labor. This theory, with the by-laws for his foundation, is to be found in his *Sozialpolitische Schriften* (vol. iii of his *Gesammelte Abhandlungen*, 3 vols., Jena 1904-06). The German shop committee law (*Betriebsrätegesetz*) of 1919 incorporates both Abbe's idea of discharge compensation and his principle that in the employment of the executive, clerical or labor force there must be no discrimination based on race, class, religion or party affiliation.

ROBERT WILBRANDT

Consult: Auerbach, Felix, *Ernst Abbe* (2nd ed. Leipsic 1922), and *Das Zeisswerk und die Carl-Zeiss-Stiftung* (5th ed. Jena 1925), tr. by R. Kanthack (London 1927); Weiss, Hilde, *Abbe und Ford, kapitalistische Utopien* (Berlin 1927); Wilbrandt, Robert, *Sozialismus* (Jena 1919) p. 153-58.

ABBOT, CHARLES, BARON COLCHESTER (1757-1829), English political figure, was born at Abingdon, but later lived at Colchester. After studying at Oxford (Christ Church) he joined the bar, then turned to politics and entered the House of Commons in 1795. He showed at once that rarest qualification of the parliamentarian, an understanding of finance; he became chairman of Pitt's Finance Committee of 1797 and wrote most of its reports. In 1802 he received the office of speaker of the house, retaining it until 1817, when he became a peer. His principal parliamentary achievement was the passing in 1800 of the Census Act. He had to face strong opposition, but at a time when vague fears of overpopulation and under-subsistence were current, the importance of

having accurate facts furnished a powerful argument in his favor. The act was passed, therefore, and it was put in force the following year. Another valuable public service was the appointment of committees to report on the arrangements made in connection with temporary and expiring laws and on improved methods of making new statutes known to the public. He also reformed the system under which public accountants held custody of government funds.

W. H. DAWSON

ABBOTT, CHARLES CONRAD (1843-1919), a physician noted for his contributions to archaeology, whose name is associated with the problem of man's antiquity in America. He was connected with the Peabody Museum at Harvard, 1876-89, and was curator of archaeology in the University Museum, Philadelphia, 1889-93. About the year 1876, on his ancestral homestead near Trenton, New Jersey, he discovered stone implements in such associations as to suggest to him three culture horizons—inter-glacial man, an intermediate culture and, finally, the relatively recent pre-Columbian American Indian. These conclusions were stoutly defended in a number of publications ranging in date from 1872 to 1907. He was convinced that palaeolithic man existed in America, and carried on a sharp controversy with his opponents, leaving to others the systematic study of the site. These investigations confirmed Abbott's conception of the intermediate post-glacial horizon, which he called "the argillite culture," but did not corroborate his claims for the earlier glacial horizon. Abbott's chief contribution, therefore, was the discovery of the Trenton site, with its two culture horizons. The term "argillite culture," however, proves to have local significance only, and does not designate a continental culture horizon as Abbott assumed.

CLARK WISSLER

Important works: Primitive Industry (Salem 1881); *Ten Years' Diggings in Lenâpè Land* (Trenton 1912).

ABBOTT, FRANK FROST (1860-1924), historian and philologist, was graduated from Yale in 1882, and continued his studies at Yale, Bonn, Berlin and the American Classical School at Rome. He taught at Yale (1884-91) and also, for sixteen years, at the University of Chicago, which he helped to organize. His last professorship was at Princeton (1908-24). His

History and Description of Roman Political Institutions (Boston 1901) is still, because of its soundness and precision, a standard work. Three books of wider interest, *Society and Politics of Ancient Rome* (New York 1909), *The Common People of Ancient Rome* (New York 1911), and *Roman Politics* (Boston 1923) contain, among popular essays, the fruits of several penetrating epigraphical studies. His last work, *Municipal Administration in the Roman Empire* (Princeton 1926), written with the collaboration of Professor A. C. Johnson, was at once accepted as the outstanding work in its field. Although Professor Abbott always held chairs in the classics and devoted much of his time to the interpretation of Latin authors, his graduate courses usually lay in the field of epigraphy and history. To the great amount of excellent dissertational work done under his supervision classical studies in America owed much in enlargement, and work in every phase of Roman history much of its scope and thoroughness.

TENNEY FRANK

ABBOTT, LYMAN (1835-1922), American journalist, religious leader and writer on social problems. Abbott began studying the industrial situation in America as early as 1870; in 1876 he became associated with Henry Ward Beecher on the *Christian Union* (later the *Outlook*), and in 1881 was made editor-in-chief. This journal under his editorship was the first religious periodical of wide circulation to open its pages to a general discussion of labor problems, carried on in editorials and in contributions from such economists as R. T. Ely and such ministers as Washington Gladden. In sociology as in religion Abbott sought to maintain a middle-of-the-road position, opposing socialism but persistently arguing against laissez-faire economics. He recommended the democratization of industry, urging that the "tool-users" should become "tool-owners." The church, he believed, should interpret and state the teachings and spirit of Jesus in such a way as to show their application to industrial problems. Although editorial and pastoral duties prevented him from making thorough studies, his interest in the subject and his editorial policy were influential in creating a new attitude toward labor on the part of the churches and in developing what is called "the social gospel." Abbott's sociological interests were not confined to labor problems.

Although he discussed them less frequently, he was also concerned with other social questions.

GRANVILLE HICKS

Important works: His sociological views are found in *Christianity and Social Problems* (Boston 1897); *The Rights of Man* (Boston 1901); *The Industrial Problem* (Philadelphia 1905); *America in the Making* (New Haven 1911). *Reminiscences* (Boston 1915) ch. xvii, describes the genesis of his attitude toward industry.

ABBOTT, SAMUEL WARREN (1837-1904), American vital statistician, was interested chiefly in the promotion of public health and in the compilation of comparable mortality statistics. In 1886 Abbott was elected secretary and executive officer of the reestablished Massachusetts State Board of Health, a position which he held until his death. He supervised the preparation of the annual reports of the board and edited the *Massachusetts Registry and Return of Births, Marriages and Deaths* (vols. xiv-xlix, 1886-90). These reports, together with his *Summary of the Vital Statistics of the New England States for the Year 1892* (Boston 1895) long served as models for similar statistical studies. "The Vital Statistics of Massachusetts for 1897 with a Life Table," published in the Massachusetts State Board of Health, *Annual Report* (vol. xxx, 1898, p. 799-830) and one of Abbott's most important contributions, was perhaps the first significant life table prepared in this country for the whole population of a state. Abbott was chairman of a committee on vital statistics of the American Public Health Association from 1893 to 1897, and a member of the commission appointed by the same association, in 1900, to draft suggestions for the revision of the International Classification of Causes of Death. Perhaps his best known work is *Past and Present Condition of Public Hygiene and State Medicine in the United States* (Boston 1900) published by the Statistical Association. Some of his other contributions are: "Influenza Epidemic of 1889-90" in Massachusetts State Board of Health, *Annual Report* (vol. xxi, 1889, p. 305-84); "Infant Mortality in Massachusetts" in Massachusetts Association of Boards of Health, *Journal* (vol. viii, 1898, p. 134-52); "The Decrease of Consumption in New England" in American Statistical Association, *Publications* (vol. ix, 1904-05, p. 1-20).

WILLIAM R. LEONARD

Consult: Whipple, G. C., *State Sanitation*, vols. i-ii (Cambridge, Mass. 1917-) vol. i, p. 206-09; "Samuel W. Abbott, M.D." in *Boston Medical and Surgical Journal*, vol. cli (1904) 502-03; "Death of Dr. Samuel

W. Abbott" in *Michigan Monthly Bulletin of Vital Statistics*, vol. vii (1904) 77, and in American Statistical Association, *Publications*, vol. ix (1904-05) 148-49.

ABDICATION, in earlier usages, was a technical legal word. *Abdicatio*, in Roman law, denoted the act whereby a father disowned his son, expelling him from his family or depriving him of rights of inheritance; it was also the name for the act of a magistrate in quitting office (because of unfavorable auspices or for other reasons) before the usual term had expired.

In later and present usage abdication is a word of semi-technical significance, denoting the act whereby a person in high office renounces his office, either formally or virtually. Generally the term is applied only to such an act by a "sovereign" ruler—such as an emperor, king, queen, dictator, sultan or pope—and is not used to designate a surrender of office by an elected head of a republic; thus we speak not of abdication but of resignation of office by President MacMahon of France, or President Diaz of Mexico. The term implies, moreover, that the abandonment of office is voluntary—to be distinguished from deposition or dethronement. However, in a majority of familiar instances recorded as abdications, the decision to relinquish office, though nominally spontaneous, was not actually so; the abdication being in such cases a final and formal renunciation of an authority which events beyond the control of the ruler had already taken from him. Some abdications, of course, have been apparently as free as any important decision can be. For abdications have been induced by a sovereign's weariness of rule, or by his physical ailments, or by his disgust or despondency over failure of projects upon which he had set great store. Involuntary abdications have sometimes been the results of defeat by foreign enemies, as in the case of the eighteenth century abdications of Polish kings under compulsion from Russia, Prussia and Austria, and the abdications forced upon lesser European monarchs by Napoleon, and in turn upon him by his victorious enemies in 1814 and 1815. More frequently abdications have been the consequence of domestic uprising. The abdications, in November, 1918, by Emperor William II of Germany, Emperor Charles of Austria, and the thirteen German state monarchs, were the result of both foreign defeat and domestic insurrection.

Abdication in Roman Catholic law is the

renunciation of a benefice or clerical office. The law of the Roman church lays down certain rules of abdication, such as that the renunciation of office must be voluntary, for a just cause, and made into the hands of the proper ecclesiastical superior; except that a pope, having no earthly superior, resigns his office into the hands of the cardinals.

There are no general legal principles governing the manner and conditions of abdication. The throne of England can, since the Revolution of 1688, be lawfully abdicated only with consent of Parliament. In the case of James II, Parliament after a debate comprising probably the most lengthy and learned discussion ever devoted to abdication, declared that James had, by his actions subversive of the constitution and by his flight from the kingdom, "abdicated the government" and "the throne is thereby become vacant." The House of Lords preferred to designate the king's action as a "desertion"; the Commons, however, desiring a more comprehensive term which would preclude any idea that James would be free to return to the throne, insisted upon the word "abdication," to which the Lords finally assented. Only a very few written constitutions have any reference whatever to abdication. The constitution of Spain provides that a special law is required to authorize the monarch to "abdicate the crown in favor of the heir presumptive"; and the constitution of Yugoslavia provides for succession "in case of death or abdication of the king."

Abdication in Japan has had an unusual history and significance. A general practise of retirement from active life may be traced back many centuries. After the advent of Buddhism into Japan (in the seventh century), with its practise of retirement by high priests into a life of religious contemplation, it became customary for emperors to abdicate after short reigns and retire to a monastic sort of life. By the twelfth century the custom had spread to other high governmental officers; and soon afterwards it became a practise in private life for a person in early middle age to withdraw from his business and his position as head of his family and to devote his remaining years to rest and study. The politically powerful families of Japan had encouraged the practise among sovereigns; for such families made themselves more thoroughly dominant by seeing that only young emperors reigned, and by having these abdicate before they reached an age when they might prove themselves too independent. The

effects of the early political abdications (a practise which continued until well into the nineteenth century) are revealed in the shortness of the reigns and the frequency of rule by minors in Japan.

FRANCIS W. COKER

See: MONARCHY; PAPACY; REVOLUTION; COUP D'ETAT.

Consult: FOR ABDICATION IN ROMAN LAW: Corpus juris civilis, *Codex Justinianus* (Berlin 1877) bk. vi., chs. xxviii and xxxi; Mommsen, Theodor, *Römisches Staatsrecht*, 3 vols. (2nd ed. Leipsic 1876-77) vol. i, p. 603-9.

FOR ABDICATIONS BY POLITICAL RULERS: the histories of the several states. Most encyclopaedias give lists of important abdications; the most extensive list is that in the article "Abdication" in *La Grande Encyclopédie*, vol. i, p. 57-59, recording 65 instances, from the fifth century B.C. to 1879 A.D. On the abdication of James II, see Blackstone, William, *Commentaries*, bk. i, ch. iii, sect. 211 and bk. iv, ch. vi, sect. 78; Great Britain, Parliament, *Cobbett's Parliamentary History of England*, 36 vols. (London 1806-20) vol. v, cols. 36-50, 58-108.

FOR PAPAL ABDICATIONS: Hefele, Joseph, *Conciliengeschichte*, 9 vols. (Freiburg 1869-90) Eng. ed. to A.D. 787 only, 5 vols. (Edinburgh 1883-96); Milman, H. H., *History of Latin Christianity*, 4 vols. (New York 1903).

FOR ABDICATION AS A JAPANESE CUSTOM: Shigeno An-eki, "The Evils of Abdication, Heirship and Adoption" in Asiatic Society of Japan, *Transactions*, vol. xv (1887) 74-85; Chamberlain, B. H., *Things Japanese* (5th ed. London 1905) p. 13-14, 231, 246-47.

ABDUCTION. The view that the carrying off of women was originally the general mode of obtaining wives was held by many of the earlier anthropologists, and the development of marriage institutions, as also the rule of exogamy, was traced to "marriage by capture." The theory is now discarded by most authorities. In spite of the fact that the capture of women in wars and raids is found to have been very prevalent in all parts of the world, there are strong reasons against regarding this as having ever been the usual and general mode of obtaining wives. The women so captured occupy in most instances a status different from that of regular wives. The choice of wives is largely regulated by custom, in which tribal endogamy plays hardly less important a part than clan exogamy. Marriage is, in lower cultures, frequently matrilocal, the women never leaving their clan, and their husbands joining them; and this was, in the writer's view, originally the general custom. Whenever the reverse usage obtains, some consideration is exacted before the husband is per-

mitted to remove the woman. When this is effected furtively or by violence, the proceeding is resented, both as an offense against the older usage and as an attempt to evade payment of the bride-price. Abduction is, in part, often resorted to as a means of bargaining from a coign of vantage. The removal may take place with the connivance of the woman, thus constituting elopement rather than abduction. It may be connived at, after payment has been made, by the girl's relatives, but without her consent. Genuine abduction thus merges by imperceptible degrees into the widespread usages in which simulated violence on the part of the bridegroom and his friends and resistance on the part of the bride's people form part of the marriage procedure. The violence may, with the same people, be ceremonial or real according as the bride-price has, or has not, been paid. These usages are most satisfactorily explained with reference to the change from matrilocal to patrilocal customs rather than as evidencing an original stage of marriage by capture. The abduction of women is, in lower cultures, one of the commonest causes of tribal warfare, and is often formally discountenanced on that account.

To a different class of offenses belongs the abduction of married women by a member of the same tribe, which is exceedingly prevalent in lower cultures and is commonly confounded in ethnological reports and discussions with simple adultery. But by many peoples who resent fiercely the abduction of a wife, adultery without abduction is regarded with indifference. The injury is usually held, as it was in Anglo-Saxon law, to be compensated by supplying another woman. The claim of a husband whose wife has been abducted is commonly regarded by tribal law as having lapsed after a given period, after which he is restrained from taking further steps to regain possession of her.

Attic law required the abductor of a free-born unmarried woman to marry her, as did also early Roman law. The edicts of Constantine and of Justinian, however, pronounced such marriages null and void, sanctioned revenge to the extent of homicide, and disallowed the petition of the victim in favor of the raptor. Ecclesiastical law, down to the ninth century, recognized the marriages as valid in such cases, but afterwards conformed to the Justinian code. After the twelfth century marriage was again allowed, with strict provisions to secure the freedom of action of the woman. The abduction of heiresses was very prevalent throughout the Middle Ages

and down to the eighteenth century, and early English law had mainly such cases in view. Under the Criminal Law Amendment Act, 1885, mere abduction is a felony if the victim be under sixteen; abduction with intent to seduce, if she be under eighteen, and the procuring of any female under twenty one, misdemeanors. Modern American state statutes penalize abduction generally under the same circumstances and, as far as federal law is concerned, the Mann Act may be said to operate as a restraint upon the crime.

ROBERT BRIFFAULT

See: MARRIAGE; ANTHROPOLOGY; SEDUCTION; PROSTITUTION; CHILD MARRIAGE.

Consult: Westermarck, E., *The History of Human Marriage*, 3 vols. (5th ed. London 1921) vol. i, ch. xxi, p. 240-77; Howard, G. E., *A History of Matrimonial Institutions*, 3 vols. (Chicago 1904) vol. i, p. 156-71; Briffault, R., *The Mothers*, 3 vols. (London 1927) vol. ii, p. 98-108, 230-50; Bishop, J. P., *Commentaries on the Law of Statutory Crimes* (3rd ed. Chicago 1901) p. 449-52.

ABEILLE, LOUIS PAUL (1719-1807), was one of the eclectic and practical publicists who served as a link between the two principal schools of French economists in the second half of the eighteenth century. He was a friend of Vincent de Gournay and when, at the instigation of the latter, the Société d'Agriculture, du Commerce, et des Arts de Bretagne was founded (1757), he became its secretary and published its *Corps d'observations* (Rennes 1761-62). His *Lettres d'un négociant sur la nature du commerce des grains* (Marseilles 1763) permits us to range him among the disciples of Quesnay. Nevertheless in his *Réflexions sur la police des grains en France et en Angleterre* (Paris 1764) he returned to a semi-neutrality between the physiocratic school and its adversaries. He frankly adhered to the former in his *Principes sur la liberté du commerce des grains* (Amsterdam 1768); but the following year he separated himself again from these doctrines, and later supported Necker's policy of regulation.

G. WEULERSSE

Consult: Weulersse, G., *Le Mouvement physiocratique en France (de 1756 à 1770)* (Paris 1910).

ABELARD, PETER (1079-1142), mediaeval philosopher, theologian and educator. Abélard, the son of an obscure Breton noble, left his home at Pallet at the age of fifteen to become a wandering scholar. He studied in Paris at the

episcopal school under William of Champeaux and soon gained so wide a reputation by the brilliance of his attack on his master's philosophy of realism that he was induced to set up a lay school. At the age of thirty-four Abélard withdrew to study theology under Anselm of Laon, and in 1118, equipped in every branch of mediaeval learning, he returned to Paris to become master of the episcopal school. His learning and brilliant dialectic, which made him famous throughout Europe, were the chief agencies in converting the episcopal school, with a few hundred pupils, into what was soon to become the University of Paris. But his career was interrupted by his love affair with his pupil Héloïse. In spite of their subsequent marriage her family vented their anger on Abélard by mutilating him. This outrage and the change in psychology which followed it, as described in his *Historia calamitatum*, led him to retire to the abbey of St. Denis. The worldly life of the monks did not suit his new mood, and he was permitted to set up a chair in one of the dependent houses of the abbey, to which his thousands of pupils followed him. Here he wrote his boldest works, *A Dialogue between a Philosopher, a Jew, and a Christian* and *Sic et non* (a collection of contradictory theological opinions). He was accused of heresy and convicted by a synod at Soissons. During the rest of his life, both while he was teaching and while he was abbot of a wild and irregular abbey on the coast of Brittany, he was harassed by enemies. After he had returned to his chair in Paris in 1136, Bernard of Clairvaux preferred a second charge of heresy against him and he was condemned at Sens. The charge, which resulted from the anger of the episcopal and monastic authorities at Abélard's claim of greater intellectual vitality in speculation, was strained and was never seriously regarded at Rome. But Abélard, broken by this last blow, retired to the abbey of Cluny and died in the following year.

The significance of Abélard in the development of European thought is found mainly in the impetus he gave to independent thinking in place of the repetition of earlier writers on theology. Of his actual contributions to thought hardly any were accepted. In his writing he was occupied entirely with theology. The little secular knowledge which he had derived in his youth from Martianus Capella or Isidore he ignored, and the condemnation for heresy prevented the use of his works by later scholars.

They are in any case chiefly concerned with refinements of theological expression. But his general trend was to make doctrine rational, and he thus anticipated later schoolmen like Aquinas. Culture was in Abélard's time too scanty to give a proper opportunity to his brilliant intellect, and his force was spent in dialectical encounters over the phrasing of theological propositions. Abélard's chief service was his unique share in the popularization of school life which led to the founding of the universities.

JOSEPH McCABE

Works: "Opera omnia" in Migne, J. P., *Patrologiae cursus completus . . . series latina*, vol. clxxviii; *Peter Abaelards philosophische Schriften*, ed. by Bernhard Geyer, vols. i-iii (Munster 1919-).

Consult: Remusat, F. M. C., *Abélard*, 2 vols. (Paris 1845); Compayré, Gabriel, *Abélard and the Origin and Early History of Universities* (New York 1893) p. 1-23; Hausrath, Adolph, *Peter Abälard* (Leipsic 1893); McCabe, Joseph, *Peter Abélard* (New York 1901). For a partly imaginative treatment of Abélard's personal life see Moore, George, *Héloïse and Abélard*, 2 vols. (London 1921).

ABELL, ARUNAH S. (1806-88), American journalist and founder of the *Baltimore Sun*. Abell worked as compositor on a penny journal in New York City with W. M. Swain and Azariah H. Simmons. The three later moved on to Philadelphia where they established the *Public Ledger*, but it was not long before Abell decided to try his fortune in Baltimore. On May 17, 1837, he and Swain founded the *Baltimore Sun*, which was one of the early penny papers in the United States and the first in Maryland. The city then had nothing but six-cent papers, but the profound business depression then prevalent made it a bad time for starting this new venture. His paper prospered, however, and before his death he purchased "Guilford," a half-million-dollar estate near Baltimore.

Abell and Swain were supporters of the Morse "magnetic" telegraph and helped apply its uses to speedy news service. The combined circulation of the penny press in Boston, New York, Philadelphia and Baltimore was then rated at 96,000, a large figure in that day. De Tocqueville noted, when traveling in this country, that whenever a laborer, maid or truck driver had a few minutes to spare, one of these journals was likely to be found at hand. Highly sensational in their news columns, these papers—and the *Baltimore Sun* was conspicuous in

this regard—insisted that the conservative higher priced papers should subordinate partisanship to the more important function of distributing news and commenting on current events. Abell was thus a forerunner of a type of journalism which now generally prevails in the United States. However, the editors of some penny papers, notably Abell, exhibited courage and intelligence, captured new audiences, and were the greatest single force of their time in educating their readers in politics, economics and democratic processes.

SILAS BENT

Consult: Hudson, Frederick, *Journalism in the United States from 1690 to 1872* (New York 1873) ch. xxxi; Payne, George Henry, *History of Journalism in the United States* (New York 1920) ch. xviii.

ABERDARE, LORD. *See* BRUCE, HENRY AUSTIN.

ABERDEEN, EARL OF. *See* HAMILTON, GEORGE GORDON.

ABNORMAL PSYCHOLOGY is the study of mental behavior that deviates from the standard set by the normal, of whatever form and however conditioned the abnormal behavior may be. Historically the recognition of mental disorders developed a psychiatry long before psychology became an established discipline. Insanity, for instance, has always attracted attention. But psychology developed as an offshoot of philosophy concerned primarily with the nature of abstract intellectual processes, and with slight reference to the emotional basis and the types and varieties of human behavior. It was therefore only with the growth of the conception of psychology as a guide to the understanding and control of individual and social conduct that abnormal psychology came into its own. Psychiatry has now become one of its several applications, continuing to furnish abnormal psychology with important data and clues arising from clinical experience, and using in turn the psychological principles thus brought to light. Modern insight traces the play of mental abnormality in the entire range of human conduct, especially conduct of social importance.

Many significant abnormal phenomena are open to general observation. The most common is sleep, which involves a lowering and an altering of pattern of the mental activity of waking life, and which gives rise to the abnormal mental products of dreams. Familiar also

are trance, somnambulism and delirium, all of which exhibit characteristics of both dreaming and waking activity. Natural and artificial intoxication, whether in the form of stupor, agitation or ecstasy, are even more common. The search for an earthly paradise by the drug route is ancient and widespread. Equally well recognized and again occurring both spontaneously and by way of drugs, fasting or prayer, have been visions and hallucinations, or motor spasms such as the contortions of the epileptic fit or the fixed posture of the religious ascetic. The ensuing failure to recall in the normal state what was done in these conditions (amnesia), the gap or lapse in the mental life, the altered orientation or failure to recognize surroundings, the occupation with fantasies and delusions, are as striking as the original change of behavior. Possession by an alien spirit was for long the most common explanation of the changed mental condition. The belief reflected the religious doctrine of inspiration or ecstasy, or of demon possession by spirits of evil. The patient was beside himself (ecstasy); an older name for the psychiatrist was "alienist."

From such common observations can be discovered the essential respects in which the abnormal mind behaves differently from the normal. It may develop sensory disorders, including insensibility to pain; distorted sensations, such as illusory visions and voices; strange sensations from within the body; or changes of taste and mood. There may be motor symptoms—convulsions, contortions, tremors and paralyses, or inability to control muscles. A second group of symptoms consists in changes in emotional behavior, notably the dominance of anger and violence in mania. The maniac has always been the typical madman. Equally deviating from the normal are the posture and mood of depression, the immobility of despair and silent brooding. As readily observed are failures in comprehension, strange beliefs or delusions, ravings, incoherence, the mistaking of fantasy for reality—variations in the thought processes that have given to "insanity" the dominant meaning of mental disorder, which involves failure to orient, to understand and to distinguish.

The behavior of those who were plainly abnormal by constitutional defect has been equally open to common observation. The idiot is conspicuously defective; and the various types of feeble-minded, from the simpleton to the dull and stupid, have added to the picture of "not

all there." That this condition so often appeared in early childhood indicated an inherent abnormality, interfering with development. The failure of mental powers in old age has also compelled attention; while the effects of accident and of injury, particularly to the head, appeared in altered mental behavior. Thus abnormal states and abnormal persons have formed part of ordinary human experience.

Such popular knowledge influenced the developing study of the same phenomena by the more systematic procedure of science. The history of psychology is too involved and too remote for inclusion in the present discussion. It may be sufficient to indicate the several stages in the development of the modern discipline. In a sense all the life sciences had to await the illumination of the principle of evolution. Without that clue the meaning of animal behavior (including human) was ill-understood. A more direct requirement for psychology was the decipherment of the nervous system. Modern psychology is neurologically minded; but even the basis for the distinction between sensory and motor neural mechanisms was not discovered until the nineteenth century. Psychology, even when transformed from an arm-chair discipline to an experimental science, continued to focus upon the minute and elaborate mechanisms of the higher mental processes and their supports. The academic and the clinical insights were but slowly amalgamated. The fundamental importance of the emotional factors in human behavior had to make its way against the intellectualist preoccupation. The importance of growth as a process, and of the child and primitive man as authentic psychological documents, had to be recognized. The interaction of bodily and mental conditioning had to be advanced from a crude influence-of-mind-and-body relation to a significant psychogenic principle. The origin of abnormal manifestations in normal trends was gradually recognized, hard lines of separation removed and the borderland discovered; while a sounder view of the bearings of heredity and environment, dependent upon a far reaching restatement of the mechanisms of transmission, was slowly gained. As the conception that human behavior is as pervasively sociological as biological penetrated and displaced over-moralized views of conduct, human experience came to be reinterpreted, and attention to be focused upon the central problem of the composite factors of personality and their play in

human relations. This comprehensive restatement of the most fundamental problems of human life was attained, however imperfectly, almost within a single generation. Its culmination is the interpretation of the data of social psychology and of abnormal psychology from a common point of view.

The influence of the rival trends in modern psychology upon abnormal psychology and their relations to it are alike eclectic. A rigid "behaviorism" such as that advocated by Dr. J. B. Watson, which regards substantially the entire range of human reaction as the issue of conditioning, does not hesitate to draw the conclusion that abnormal behavior has the same origin. This position can be reached only by ignoring such a vast range of experience that it is hardly entitled to consideration. The attention of the older type of analytic psychology to the logical processes (and their sensory support) in intellectual activity hindered consideration of deviating types; and the experimental program, however differently oriented, followed a related tradition. The problem of Gestalt psychology lies in the same field. The emphasis upon a functional and dynamic psychology, however, was favorable to an extension of interest to the more complex integrations, including the abnormal. The stimulus to the study of abnormal states and conditions is derived largely from interests outside of, or tangential to, the standard disciplines of psychology. It arose mainly from the clinical interest in human behavior and character, owes much to medical, biological, anthropological and general "humanity" pursuits, and is specifically connected with the educational motive of control in the interests of what we now call mental hygiene. There has been continuous medical interest in the mentally abnormal, in deviation of character make-up and in the vicissitudes of human nature (for which Dessoir proposes the term psychognosis); and philosopher-psychologists (in France more than elsewhere) have found some confirmation and illustration of principles in the abnormal field; but for more complete development abnormal psychology had to await the convergence of these many-sided modern interests. The Freudian contribution holds the unique position of a general psychological interpretation derived from the study of abnormal phenomena. Parallel with the genetic approach studying mental origins and development, and the experimental technique determining precise relations, the abnormal had become a method

of investigation as well as a division of the phenomena of the mind.

With the conception of abnormal mental behavior established, psychiatry incorporated a psychological point of view into its analysis and technique, and insanity became a legal rather than a medical concept. Psychology and psychiatry together developed certain characteristic patterns of deviation from the normal. These concepts have been the basis of all subsequent work. Mental disturbance associated with organic lesions, loss and disorder of function, or defect, were regarded as constituting a central group of the major mental disorders. The delusions of grandeur, exuberant fantasies, incoherence, disorientation and coarse deterioration of behavior that marked general paralysis of the insane were seen to be as significant as the motor impairment that gave it its name. It was realized that paretics could be diagnosed psychically as well as physiologically, and the association of this condition with syphilitic infection placed that disease in line with allied medical findings in other fields. Symptoms came to be regarded as but clues to disease patterns of the total psychic liability in one and another type of variation. The symptoms of elation and agitation (mania) and those of depression (melancholia) were recognized as phases of the manic-depressive psychosis, one type form of mental disorder. An equally useful and comprehensive category was that of dementia praecox, the failure to continue the integrative development of youth and the tendency to splitting or division of the psychic personality. In such fashion the orientation of psychiatry became dominantly psychological.

Early in the history of abnormal psychology the functional nervous disorders moved to the foreground of consideration, not only because they furnished so large a quota of all mental maladjustment, but also because in their analysis lay the clues to mental mechanisms essential to the normal maintenance and direction of life energy. Insight into the mental mechanisms in health and disease has been one of the major cooperative contributions of psychiatry and psychology. Of the psychoneuroses thus studied, hysteria is the richest in bearing. From the ancient view (embodied in the name) of its association with feminine liability, to the modern concept of a comprehensive and variable neurosis or neurotic tendency, is a far step; the transition occurred through a repeatedly altered and slowly matured development

of the concept. Hysteria as a nervous disorder with a recognizable though protean range of symptoms, may be viewed as the manifestation, in morbid intensity, of a pervasive liability and a particular temperament. In the one aspect, it involves emotional over-excitability; and in the other a tendency to dissociation. The cruder outbreaks of angry and destructive hysterical violence, the panicky fears, the high-strung sentimentalism, the erotic excesses, even the Puritanic restraints, fall within the picture. Complex emotionalisms, from mob violence, disturbing prejudices and war hysteria to paroxysms of grief and despair and religious ecstasy, present a range of disturbances individually and socially significant. Wayward impulses, irresponsible outbreaks and deficiencies of conduct may be similarly conditioned.

Such over-emotionalism, involving rapid and large oscillations within the emotional wave, intensity, impulsiveness and instability, enters into the picture of a temperament; it is represented also in a genetic stage. A distinguished British neurologist, Dr. Core, maintains that in the pattern of their responses children are hysterical, and that primitive people show similar characteristics, though in different forms; moreover all but the most stable (or phlegmatic) when under stress incline to be hysterical. To Dr. Core the process of civilization is in part the reduction of the natural hysteria of the human race. Consistent with this interpretation is the Freudian principle of regression, which regards anger outbreaks, intensive fears, losses of emotional balance and lapses into uncontrollable impulses as regressions or relapses to behavior on a lower genetic level, in part that characteristic of the child, in part that of primitive man. The greater emotional susceptibility of women, as well as the special waywardness, vagaries and flighty, high-strung escapades of adolescence and youth, fall within the scope of this diagnosis, often well within the normal orbit, at times outside it.

The strong personal tone of the range of emotions, principally those of sex, involved in this phase of the hysterical liability is peculiarly important. Under the hysterical stress experiences are responded to dominantly for their bearing on personal esteem or disesteem; the objective attitude is weakened and life centers too vividly and too intensively around the social estimates of self. In the period of courtship and mating and in the erotic relations emotional attitudes are still more centralized. The hyster-

ically implicated functions are the fundamentally vital ones associated with the dominant urges, anchored in the less consciously controlled mechanisms. Among these the sex relations may readily become dominant.

The tendency to partitioning of the psyche or to its partial disintegration, though equally characteristic of the total hysterical liability, is less readily interpreted. It appears clearly in the more extreme cases of this neurosis, yet in others may play but a slight part in the temperamental disposition. When pronounced this tendency may lead to violent contortions, loss of consciousness, altered personality. When more partial it may induce hysterical blindness, deafness, anaesthesia or paralysis, and mimic almost any variety of disease symptom upon which the liability has been fixed by way of a psychic association. These liabilities were clearly manifested in the war neuroses, when under unbearable stresses from the menacing attack upon the danger instinct men succumbed to "shell shock." The connection between over-emotionalism personally centered and the tendency to dissociation is not clear. But it can be noted that Charcot found the most susceptible hypnotic subjects among his hysterical patients; that Janet in the same group found pronounced pseudosymptoms, sensory and motor curtailments and contractions of the ego, as well as trances and fugues; that Freud found the most elaborate examples of subconscious and fantasy manifestations and bodily symptoms of psychic origin, and that Flournoy and Morton Prince found the typical cases of multiple personality and trance utterances, from Delphic oracles to automatic writing, among similar patients. When this variety of abnormal behavior appears in its most developed form among hysterical patients, we seek a unifying concept, and perhaps find it in an emotional instability, an over-action and dissociated action of the deeper emotional mechanisms, breaking away from the higher central control.

Hysteria becomes one of the major interpretative concepts for a great variety of behavior, including episodic impulsions such as kleptomania or sex delinquencies and wayward and irresponsible conduct in general. Prejudice, riot, war and class hysteria, fanaticisms and irrational beliefs, deeply disturbing complexes, illustrate as well that when feeling runs high, reason runs low. In the Freudian incidents they induce bodily symptoms. A fertile source of hysterical complexes may be seen in the nature-

set conflict between the biologically older, deeper urges, all highly emotionalized and anchored most strongly in the vital needs, and the later evolved controls of reflection and discipline associated with the higher brain centers. The commanding role of sex in the conflict remains conspicuous and pervasive.

That other formulae redistributing life values may similarly represent other types of neurotic liability or syndromes of functional neuroses, is more than probable. Neurasthenia represents the other great division of such liability. Its nucleus is an undue sensitiveness to fatigue, an inward turned psychic attitude, a hesitant reaction, a fear ridden distress, a motor incoordination, a far reaching anxiety, a devastating depression. This presents again a consistent though variable picture and in most respects one directly contrasted with the first, the hysterical tendency making for impulsive activity, and the neurasthenic for a many-sided incapacity. Less menacing socially, neurasthenia is the more subtly disqualifying and unfitting individually, and plays havoc with the attainment of that efficient integration of instinctive urges and reflective control that enters into the standards of balanced efficiency and the ideals of mental hygiene. The psychasthenic variety of neurosis is affiliated with it but extends into the domain of elaborated systems of complex behavior. It overlaps the more serious distortions of the psychopathic personality—eccentric, exotic, strangely sensitive and yet more strangely insensitive, following recklessly a few directive urges.

The mechanisms involved in abnormal psychology have been notably developed by Freud and his followers. To accept this approach as significant and helpful does not imply a full acceptance of the doctrines of Freud; it does, however, imply a conviction that the Freudian insight is essential to abnormal psychology. We shall never return to pre-Freudian ways of thinking about human behavior, its assets and liabilities, its vicissitudes and vagaries. Among the Freudian principles is that of the importance of subconscious activities and processes representing (in Jung's view) the deeper and older, more primary and instinctive urges and action tendencies—a sort of racial repository. This subconscious type of activity is more freely expressed in fantasy-romancing, both in day-dreaming and in the dreams of sleep. It is an order of thinking which proceeds mainly by the pleasure principle and against

which the reality principle (the stress of things as they are and their recognition by reason) has to make its way. The resulting neurosis may be an escape into illness, an assumed or imposed disqualifying incapacity that makes further struggle unnecessary; or it may be an irresistible fixation to which Freud assigns a sex bearing. Owing to the same conflict repression occurs, and the unpleasant and upsetting is buried alive and continues to trouble. The psychoanalyst attempts to bring these disturbing memories to the open forum of the conscious, where they may be set in order and dismissed. Inducements to neuroses may be found in early childhood incidents, upsetting shocks, sexual in most cases, by way of a trauma or psychic assault that leaves a functional scar. Conflict, especially between the powerful native urges and their social repression, is the essence of the situation.

The taboos that operate most intensively are those surrounding sex. Making sex central, Freud evolved his "family romance," in which the child-parent relation is the crux of the (potentially) neurotic situation. In one form it becomes the Oedipus complex in which the son with his emotions fixated erotically upon the mother develops a usurping jealousy of the father. The interpreting mechanism is that of symbolism. Accordingly dreams have on the one hand a patent content, and on the other hand a latent meaning which is the symbolically disguised real meaning, to be interpreted by analysis.

Another mechanism is compensation, by which, in dream and fantasy or delusive belief, the subject finds compensation for his defects by resorting to an unreal world of self-gratification. The great variety of cultural myths and traditional fairy tales are explained by reference to the same principle. They thus become racial or folklore versions of the same theme—the insistent struggle for a fuller, richer life, more abundantly or more freely satisfying the vital urges. The mechanism of rationalization also enters the picture, cloaking in the consolations of reason the repressed or unsatisfied desires of a thwarted life.

This selection of Freudian principles and mechanisms may serve to indicate the mode of approach and the positions reached by the school. The method and the conclusions apply to behavior patterns and to personalities. Much of the doctrine is summarized in the term "complex," meaning a set of ideas (on the will

side a "wish," on the sensation or action side an impulsion or impediment of behavior) highly charged with emotion, that checks or warps the natural and effective relation between stimulus and response. Complexes condition neuroses and reveal their points of origin.

In its bearing on personality, analysis as developed by Jung has led to the recognition of the two dominant types of extravert and introvert. The extravert is the more common type, with his main psychic energies directed outward to the world of things, occupations and objective interests, and but little troubled by inner reflections, doubts or emotional resistances. The psychic energy flows freely into channels of momentary occupation and is likely to be abundant, bubbling, enthusiastic. Jung recognizes several sub-varieties distinguishable as the dominant trend is modified by sensory, motor or reflective interests. He applies the same system of detailed classification to the introvert. The introvert stands closer to the neurotic source. In him the flow of psychic energy meets with resistance, with the inhibition of hesitant motor impulses, of timid withdrawal or troubled reflection. The psychic energy is directed inwardly instead of going out to objects and active pursuits. Naturally he is a more complicated individual, largely by reason of emotional complication; his aspirations may run higher, his feelings deeper, his patterns of behavior may be more intricate. For one marked introvert, there are a score mildly and irregularly introvert. Indeed every individual must be equipped with extraverting and introverting trends; but except in the very weakly toned and neutral nondescripts, there still remains a dominant type pattern.

Kretschmer makes a similar differentiation of personality types from the side of clinical experience and bodily build. He puts the question: If you succumbed to a mental disorder (for whatever reason, by inherent frailty of constitution or excessive stress of circumstance or both), what type of abnormal pattern would your neurosis or psychosis take? In the answer you will find your psychic type. On the one hand stand the manic-depressive psychoses, with their large and typically alternating fluctuations of mood (cycloids). The other statistically large component among cases of mental disorder is that of dementia praecox (schizophrenia), in which the distinctive tendency is that of dissociation or a split personality (schizoids). Naturally there are as many exceptions

as conformities, and these Kretschmer calls the dysplastic types. He makes much of the temperamental equivalents among normal people (cyclothymes and schizothymes), thereby justifying his findings as a contribution to the psychology of character analysis. His investigations associate psychic with physical types. The pyknic (robust, stocky) bodily constitution is far more abundant among those of cycloid psychic disposition; the schizoid disposition is found most typically in the asthenic constitution and in the athletic.

Parallel with the insight into the determination of behavior from above through the psychic mechanisms (notably the Freudian ones) has come equally novel and convincing evidence of the influence from below, principally through the glands of internal secretion (endocrines). The one may be termed the psychogenic, the other the physiogenic principle. Normal and abnormal behavior alike are subject to both sets of determination. It has been suggested that each of us is a physio-chemical as well as a psycho-sociological-historical person, and that the resulting personality complex is in no small measure the expression of glandular balance, dominance or deficiency.

The specific evidence is too detailed for discussion here. It is sufficient to refer to the thyroid, the "miracle gland," extracts from which, when administered to feeble-minded cretins, in favorable cases have accomplished their approximate restoration to normality; or to recall that over-excitability of the hysterical order is definitely connected with over-activity of the thyroid, and phlegmatic apathy with its under-activity (again in certain orders of cases); that the mechanisms by which active secretion of the adrenal glands occurs in violent emotional states (anger and fear) have been established; that the pituitary gland is closely associated with the determinants of bodily growth; or that the profound influence of sexual urges on behavior is again a glandular function of a different order. From such conclusions may arise a future chemistry of temperament, regulating alike normal and abnormal behavior.

Significant in this contribution is the close connection of so many of these glandular processes with the functions of the autonomic nervous system. This structure, by far the older in evolutionary terms, becomes the regulator of the vital, life shaping reactions; while the later superimposed central nervous system represents the higher level of conscious, rationalized

control. Not a little of the conflict of which life consists, and which under undue stress precipitates mental disorder, may be referred to the antagonism, the imperfect adjustment, of these two systems. Modern civilization in increasing measure makes difficult demands upon the central nervous system, while the older aboriginal urges must still be satisfied. The total nervous equipment was evolved to meet far simpler conditions, and the resulting strain expresses itself in the marked increase of mental disorder and disqualification.

The social applications of abnormal psychology may best be approached by way of child psychology. That the imbecile remained permanently in a childish state of mind was recognized of old. The picture of mental deficiency is that of arrested development, nor is it in any way accidental that Binet arrived at the concept of mental age through the practical problem of separating the subnormal pupils in the school population. By projecting the concept of retardation backward, one reaches a definition of the imbecile (mental age from three to seven) and the idiot (mental age below three years). From the more useful statement of mental age in terms of the intelligence quotient (I.Q.) is derived the category of the feeble-minded, indicated by an I.Q. of less than 70. This group may be subdivided into morons (I.Q. 70 to 50), imbeciles (50 to 25) and idiots (below 25). Except for a percentage, small but not negligible, of cases of arrested development due to disease and other causes, the mental defectives express a hereditary defect. This means mainly (as Dr. Myerson has shown) that some types of feeble-mindedness run in families; but other causes (notably syphilis), and the spontaneous occurrence of feeble-mindedness in almost any grade of human stock, must be clearly recognized. With some exceptions the individual I.Q. remains constant throughout life, so that the grade of intelligence as thus tested is of fundamental importance in the personal data of any case of social delinquency or maladjustment. Following the same procedure, it becomes possible to determine superior intelligence.

But more consequential is the study of the symptoms of "nervousness" in children and the inclusion of the maladjusted child in the program of abnormal psychology. When Dr. Cameron enumerated as signs of nervousness in young children poor sleep, irregular feeding habits (refusal of food, food resistance, food

whims, vomiting), habit spasms (finger sucking, twitchings, later stammering), negativism or the persistent "no" habit, and contrary patterns of reaction; and when he added that childhood constitutes a distinctively "nervous" or emotionally sensitive period notably characterized by tendencies to emotional upset, anger states (tantrums) and fear states (night terrors, imaginative dreads, panicky fears and violent disgusts) he outlined a program of interpretation that in its subsequent development has completely revolutionized the neurological direction of early childhood. It has shifted the interpretation of child behavior from that of naughtiness or moral transgression to that of a neurological difficulty. This contribution from the abnormal side has been of far reaching consequence in indicating the essential problems of child growth or maturing. It underlies the program of the nursery school; it continues in the free methods of progressive education. It introduces a different perspective of values, of what is important and what secondary, in the early educational process. It gives hope that later neurotic disaster may be avoided by wiser adaptation of training to the individual needs of children according to their psychological types. The whole technique of modern child study, which extends from the feeble-minded to the gifted or superior children, is strongly influenced by the clinical attitude developed in the observation of symptoms in abnormal children.

The same interest has made central the matter of adjustment; for the abnormal child is frequently the maladjusted child. Environmental maladjustments or errors in management affect most disastrously the sensitive, nervous types of children. The chief obstacle to successful adjustment is some form of nervous instability. The two rubrics of the unstable individuals and the maladjusted individuals grow in complication when the child becomes the adolescent. Not only does this deeply organic reconstruction place increasing stresses upon nervous instability, but it increases the need of adequate outlets for the more complex and compelling urges. It is the failure in such adjustment that brings to the fore the problems of unhappiness or of delinquency. Misconduct takes the direction of destructiveness, mischief making, wilfulness, truancy, vagrancy, stealing, cheating, lying, cruelty or sex offenses. The conclusion derived from clinical experience is that such forms of behavior grow out of conflict situations deeply anchored in instability of

a neurotic type and out of a maladjustment within the family or in the social stresses and imposed restraints.

A normal intellectual life, establishing right contacts with knowledge and control led by reason; a normal emotional life with proper outlets for sympathy, cooperation, generosity, fair play and control of fears and angers; a normal social life with the stimulations of companionability, consideration and respect, and the reciprocal attraction of the sexes; such is the warrant of a normal development. Upon such a diagnosis most remedial policies are based. The remedial agency is often the social worker. The foundation of mental clinics in association with schools, social aid organizations, courts, churches, special foundations, also represents the practical recognition of findings in abnormal psychology. Diagnosis usually utilizes the genetic method; it is realized that the early environment gives way in importance to the maturing environment, and that simpler impulses are overlaid by later complications. The imperfect overcoming of early tendencies, a variety of mental infantilism, may create difficulties leading to delinquency or to psychic impediments. The becoming emotionally as well as intellectually adult, the finding oneself in work, in serious purpose, in play, in the love life, in the total social adjustment of interests and pursuits—this maturing process is the difficult achievement, and marked defects in it appear as abnormal behavior.

One of the more socially important phases of such abnormal behavior is criminal activity, and among the applications of abnormal psychology, criminal psychology offers peculiarly complex problems. The central consideration is that of the psychology of the criminal, including the causes of crime. Quite distinct in scope and application is the psychology of "criminal" procedure, including that of evidence, detection of crime, the setting of the trial, the function of judge, jury and witnesses, the role of prejudice, public opinion, etc. A third field is the psychology of punishment and reform. All have been profoundly affected by the advances in abnormal psychology.

The present discussion must be limited to the more intimate phases of the psychology of the criminal and the orders of crime. The divergence of opinions in regard to the dominant causes (including motives and urges) of criminal behavior indicates the issues. Crime is a socio-legal term; the behavior patterns that it

implies are patho-psychological products. From the point of view of abnormal psychology the latter concept must dominate. There are well recognized (abnormal) tendencies to deviating behavior; under certain circumstances phases of such deviating behavior become criminal. There is no independent psychology of criminal behavior apart from deviating behavior. Even the social notoriety or prestige of law breaking as a feat of adventure and defiance finds its parallel in similar lures of social display, just as in the opposed emotional reaction the sense of disgrace and the social stigma of the trial and the prison have their counterparts in the social disapproval attaching to a large variety of (moral or conventional) misconduct or even misfortune.

The orders of crime likewise refer back to the same psychological sources. At the simplest these may be classified as crimes of malice (15 percent), crimes of acquisition (75 percent) and crimes of lust (10 percent). (The numbers are derived from one group of English statistics and are typical of their relative occurrence.) This does not mean that the tendencies to anger, to amass property, to indulge in sex passion are the most unruly trends in human nature, or the most deleterious to social welfare, but only that in certain of their expressions they come in conflict with the common good. It means that basic to such conduct when it is "criminally" exhibited are fundamental human urges shared by all, which if properly directed contribute to human welfare and happiness; it means that because these urges are strong and uncertainly poised, they are apt to be overdone and go wrong; it likewise means that the complex organization of the social environment as we know it and as we have helped to make it offers special inducements to the excessive and distorted expressions of such urges. It means that psychological defect, such as mental deficiency and still more decisively defective emotional control, is the basic "cause" of crime in at least a considerable group of so-called criminals.

If we take the next step and ask how far original constitutional deviation is the responsible factor, and how far the environmental stress, we enter the controversial field. The most definite expression of the first appears in the views of Schlapp and Smith (*The New Criminology*, New York 1928) who hold that an unbalanced glandular action is the determining factor. In this revised sense the criminal

is predominately born and not made. The evidence of such glandular origin of psychopathic deviation responsible for crime is comprehensive. The overactivity of the thyroid intensifies the urges and diminishes control; its underactivity is related to the low grade mentality conducive to crime. The relation of kleptomania to sexual periodicity in women is well established. In many respects the thesis is supported that so far as disordered emotions are due to defective human chemistry, criminal emotionalism becomes one form of expression of emotional unhealth. The same order of social temptation surrounds a considerable proportion of the community; those who succumb to crime (no differently from those who develop psychoneuroses) do so because they belong to the constitutionally deficient type of one order or another, intellectual, emotional, generally psychopathic. Superiority may have a similar basis; nor is the psychoneurotic disposition without its (at times significant) compensations. So far as such neurotic disposition is explicable in glandular terms, the argument may take that form.

Those who find the Freudian clue adequate and enlightening in regard to the causation (or motivation) scheme of deviating behavior generally, and of the psychoneuroses more particularly, are prepared to extend that application to the psychology of misconduct and specifically to the varieties of misconduct recognized as, or associated with, crime. They find the decisive factor in a strong and disturbing mental and emotional conflict. Such conflicts in turn have a setting in human relations, as well as in psychic and organic urges. Family conflicts, adolescent cravings, the emergence of sex as the usurping emotion, over-repression, protests against deprivation or inferiority feelings, present the setting in which truancy, delinquency, lying, stealing and irregular sex practises find their motivation patterns. The diagnosis is completed by the further idea that crime is at times the surrogate or substitutional escape of emotions aroused by a conflict situation, and that the crime represents a false solution of a trying situation (as do neuroses likewise). This view recognizes the neurotic dispositional factor, alike in defective mentality and in imperfect or mis-trained emotional control. It places maladjustment, delinquency and crime in the allied groups of deviating behavior with a closely related diagnosis. Accordingly, while stealing or breaking in or a hold-up constitutes the

crime, the true situation is the resort to stealing for social or personal display, for indulgence, for excitement, for revenge. Shoplifting by girls and freight car looting by boys, exploiting sex allure by women and hold-ups or forgery by men, register behavior patterns consistent with the psychology of male and female traits. Their treatment must follow the same psychological clues. Reform becomes a problem in readjustment. Complicated by different psychopathic deviations, similar psychic situations may result in different orders of crime. What is done is less significant than the source of the urge and motive. Consistent with this view is the predominating juvenile character of so large a proportion of all crimes. That there are from five to ten times as many male offenders as female is likewise an important part of the problem. The clues to their comprehension are psychological.

Those who emphasize the environmental factor do so for a variety of reasons. The extreme position is that of the "behaviorist" who regards all behavior, desirable and undesirable, as the result of conditioning systematized into training, and asserts that a proper environment and training will produce from any given human material not markedly defective to begin with, a worthy, efficient, industrious citizen in any profession. Criminals are held to be completely made by their conditions. This view comes into such gross contradiction with experience that it can hardly be accepted. But convincing evidence of the environmental factor in producing crime comes from the clinical records in the readjustment of delinquents and young offenders, from the recent experiences in humane and educative prison discipline and from a variety of sociological studies. Its great importance, which it shares with the emphasis upon favored disposition, lies in its bearing upon the methods of treatment and reform; in time it may completely transform the penal code and the false psychology and consequent sociology upon which penal traditions are based.

Yet these psychological principles cannot be indiscriminately applied. Socially and statistically a career of crime may follow upon quite the same order of deliberate and rationalized plan as is involved in ordinary honest pursuits. Low standards of behavior and temptation abound. Shady transactions, skirmishing just within the pale of the law, and occasional encroachments beyond it are common failings. Any adequate survey of crime leaves in doubt

how much of it is of psychopathic origin. Institutional statistics may place it as low as from 7 percent to 10 percent if a marked psychopathic standard is insisted upon and as high as 50 percent if any measure of mental defect and emotional abnormality is a sufficient warrant for inclusion in this class. The crimes associated with mental defect are of one order; there are other crimes, like embezzlement, that are definitely crimes of intelligence. By reason of these complications the analysis of crime must remain largely a sociological study, however much guided by the findings of abnormal psychology.

The social menace of abnormal states and conditions invades every occupation and profession. Its civic importance was brought forward by the mobilization of the Great War, with the numerous rejections on the basis of mental unfitness among the enlisted soldiers. The records of shell shock and the necessity of maintaining psychiatric divisions behind the lines; and the foundation after the war of hospitals for rehabilitation of veterans, brought vividly to the fore a suggestive picture of the widespread incapacity in the industrial and social world caused by mental disqualification.

The constructive ideal becomes the program of mental hygiene; and the recognition of the importance of this completely modern discipline itself summarizes the achievements of abnormal psychology. The normal assets of a well-integrated, well-rounded personality appear as resulting from wholesome development of a stable nervous control and a satisfactory adjustment to the conditions and decisions of which life consists; the liabilities appear in the deficits, the impediments, the handicaps of abnormal attitudes, in the lack of balance between contending urges, in weakened or disorganized controls. Sanity becomes a more distinctive concept, a more exacting ideal, by virtue of the expansion of the older limited concept of insanity, as applying to profoundly altered mental conditions, into the concept of mental deviation and deficit. There are levels of mental efficiency, of competent adjustment, of successful life management, if not of sanity, that are of high social moment. The efficient control of the mental resources of a people, the maintenance of high standards of mental hygiene, are as vital to national welfare as any contributing factor to human progress.

JOSEPH JASTROW

See: PSYCHOLOGY; PSYCHIATRY; PSYCHOANALYSIS;

MENTAL HYGIENE; CHILD PSYCHOLOGY; EDUCATIONAL PSYCHOLOGY; SOCIAL PSYCHOLOGY; MENTAL DEFECTIVES; MENTAL TESTS; PERSONALITY; JUVENILE DELINQUENCY; CHILD, PROBLEM; ADOLESCENCE; INSANITY; ALIENIST; CRIMINOLOGY; SEX EDUCATION.

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ABOLITION. The history of the movement for the abolition of the institution of slavery and the traffic in slaves is at once a study of the forces behind an organized movement and of the machinery for effectively influencing humanitarian sentiment and political opinion.

Opposition to slavery arose with the beginning of the Atlantic slave trade. The zeal of missionary orders, closer economic relations with the Negro and a changing European *Zeitgeist* made possible the growth of the cult of "the noble savage." During the eighteenth century this curious and friendly attitude toward non-Europeans was incorporated in the literatures of the maritime nations (*Robinson Crusoe*, for example), thus preparing the popular mind for the reception of antislavery ideas. Particularly in England after 1725, philosophical deism and evangelical piety rivaled each other in helping to swell the body of humanitarian feeling. A rapidly growing slave system, however, seemed to mock the dreams of reformers. Such conditions made inevitable a conflict between slavery and humanitarianism.

The first important direct attack on modern Negro slavery was made by an evangelical, Granville Sharp, who in 1771 and 1772 brought a Negro named Somerset before Judge Mansfield. Hargrave, the attorney for Somerset,

argued that the rules of the vanished villeinage, the only possible legal basis for the existence of slavery in England, actually did not tolerate but destroyed it. The decision, incorporating this point of view, resulted in the liberation in England of 14,000 or 15,000 slaves, valued at about £50 each. A similar decision, in the Joseph Knight case in Scotland (1778), completed the process of emancipation in Great Britain. Sharp's efforts to secure Negro freedom in the British colonies by extending these judicial decisions, on the ground that slavery was "absolutely contrary to the laws of reason and equity, as well as the laws of God," were unavailing, because colonial slavery, having the sanction of positive law, could be abolished only by legislation.

The legislative attack began after the American Revolution under the leadership of Thomas Clarkson, William Wilberforce and the younger Pitt. Their plan was not to molest the institution of slavery but to attack the slave trade. This end was to be obtained by laws against the traffic in each country and by international agreement for their enforcement. Sharp wished to abolish slavery as well as the slave trade, but the other eleven members of the Abolition Committee, organized in 1787, were convinced that the destruction of a traffic which sometimes carried as many as 100,000 Negroes across the Atlantic in one year and which yielded an average annual net income of 24 percent, was a sufficiently large undertaking. Emancipation would necessitate overriding the irritable British colonial legislatures, like that of Jamaica, whereas the slave trade could be outlawed by Parliament. Moreover the French Revolution destroyed the hope of early abolition by England alone or in agreement with other powers, threw the slave trade more largely into British hands, and caused the temporary emancipation (1784-1802) of the slaves in the French colonies, largely in order to make these colonies valueless for the English, who were then engaged in their conquest. Eventually selfish economic interests inspired some of the British planters to vote for abolition, since they did not wish the former French, Dutch, Spanish and Portuguese colonies to be well stocked with slaves if they should be returned to their original owners. In 1806-07 a new and more zealous minister, Charles James Fox, was able to secure the abolition of the slave traffic.

In the United States the twenty-year period for carrying on the slave trade which had been

granted by the constitution ended on January 1, 1808. Slavery had been rapidly disappearing in the northern states for economic reasons, and until 1807 the controversy in the United States was mild in comparison with that in England and France.

In America (1696) and in England (1727) the Quakers had been the first organized body to condemn the slave trade. Two American Quakers, John Woolman (1720-72) and Anthony Benezet (1713-84), the latter a correspondent of Sharp and a medium of information for Clarkson, were of international importance. The first European state to abolish the slave trade, however, was Denmark, which in 1792 prohibited the importation of slaves to its own possessions; this decree was made effective in 1803.

The fundamental problem concerning the means whereby abolition was to be made universal and effective continued to vex the English abolitionists. The African Institution was organized in 1807 to replace the old Abolition Society of 1787. The primary objects of the new organization were to watch over slave traders, to procure abolition in other countries and to promote the civilization of Africa by missionary enterprise and by commerce. The destruction of the traffic would, it was hoped, ameliorate the lot of the slaves in the West Indies and make possible the economic development of Africa.

The immediate task, however, was to lay plans for universal abolition at the end of the Napoleonic wars. Lord Castlereagh, who had voted against British abolition on the ground that the act could not be enforced, devoted his years at the Foreign Office (1812-22) to securing universal outlawry of the traffic in slaves. Other British foreign secretaries applied themselves to the same problem with the result that between the end of the Napoleonic wars and the Webster-Ashburton Treaty (1842) the slave trade was put under the ban of the civilized world, and machinery for its suppression, such as the mutual right of search, cruising squadrons and mixed commissions, was established.

Nevertheless, because of the great demand for slaves in Brazil, Cuba and the United States, universal outlawry and all the means of law enforcement could not prevent the Atlantic slave trade from reaching its height between 1830 and 1860. This was largely due to the increased market for cotton, coffee, sugar and other tropical products. Smuggling to the

British colonies was checked by a registry of slaves before the death of Castlereagh in 1822, but elsewhere the illicit trade flourished. British antislavery propagandists saw that slavery would have to be abolished not only as an evil in itself but in order to make the abolition of the trade effective. Accordingly in 1823 an Anti-Slavery Society was organized to effect the gradual emancipation of the slaves in the British colonies. After a bitter ten-year struggle, under the leadership of Thomas Fowell Buxton and Zachary Macaulay, a measure favoring British emancipation, including a four and a six year period of apprenticeship, became law in 1833. This victory was partly due to the fact that British slavery had become unprofitable. The British Empire was expanding its trade in the temperate zones and in Asia. The East Indian sugar monopoly in England and joined in the antislavery cry. To establish emancipation it was necessary for the British government to offer only £20,000,000 as partial compensation to the financially embarrassed colonial interests smarting under the blows of the humanitarian attack. Neither the warning example of Haiti nor the possibility that the sugar colonies might be completely ruined was sufficient to stop the antislavery movement.

To secure universal emancipation, obviously the next step, the British and Foreign Anti-Slavery Society was organized in 1839. It has been active ever since. Throughout the entire history of the abolition movement the chief influences in forming abolitionist sentiment in other countries had emanated from England. Now the new society applied itself to its missionary task with redoubled fervor and administrative competence. It summoned two international antislavery conventions in 1840 and 1843, in both of which American abolitionists were greatly interested.

In spite of sporadic beginnings in the eighteenth century and such attempts in the first decades of the nineteenth century as the formation of the American Colonization Society in 1816, abolition did not become a serious problem in the United States until 1831. In that year the South was alarmed by the defeat, by only one vote, of a bill in the Virginia senate to colonize free blacks and thereby encourage private emancipation of slaves. Even more disturbing was the unyielding tone of William Lloyd Garrison's *Liberator*, first published in 1831. With a passionate conviction Garrison denounced

the conspiracy of silence about the institution of slavery, and insisted on being heard. He had to contend against indifference, antipathy to the blacks, belief in moderation, the fear of disturbing the delicate status quo and especially the economic dependence of the North on southern cotton. Historical opinions differ as to the wisdom of Garrison's extremist stand, but there can be no question that he did manage to attract attention to the slave problem. In 1832 the New England Anti-Slavery Society was organized, and the next year the American Anti-Slavery Society was formed under the presidency of Arthur Tappan, with Garrison as one of the secretaries. Their members were extremely effective in organizing abolitionist sentiment and bringing the whole issue unpleasantly to the fore. They invaded the church, the college and the law court; they used the lecture platform, the public meeting and the political party; they spread antislavery literature even in the South. They had adherents as respectable as Wendell Phillips, John Greenleaf Whittier, Lewis Tappan, Edmund Quincy, Joshua Leavitt, William Jay, James G. Birney, William Goodell and Amos Phelps; in Congress John Quincy Adams presented their petitions in spite of the opposition in the South. The killing of Elijah P. Lovejoy in 1837 because of his antislavery utterances intensified the abolitionist feeling. The growing tendency of Garrison to fight for causes other than antislavery, such as woman's rights and non-resistance, produced an antislavery split in 1840. Garrison and his followers believed that both the churches and the Union were in the hands of the slave power and they were ready to break up the Union. The Tappans, the Beechers, Joshua Leavitt and their followers believed that the churches and the Union could be used to destroy slavery. One group opposed political action; the other favored it.

The problem of the annexation of Texas was made a test case by the antislavery forces on both sides of the Atlantic. The war with Mexico, the annexation of the new territory in the Southwest, and the passage of the Fugitive Slave Law (1850) alarmed the abolitionists and directed their energy even more intensely into the channels of press propaganda. A realignment of sections on the basis of the nascent industrialism brought the Northwest and the East together. The political evidence of this realignment was the organization of the Republican party between 1854 and 1860 with its program of high tariff, free homesteads, a friendly

attitude toward immigrants, and the non-extension of slavery. This constituted notice to the South that its economic and political life in the new industrial age would be circumscribed. The Republican victory in 1860, the secession of the South and the emancipation of the slaves as a war measure are part of the well-known story of slavery in America. The decade of the fifties had witnessed the education of the North in the Unionist sentiments of Daniel Webster, at the same time that the fictional propaganda of *Uncle Tom's Cabin*, the story of "Bleeding Kansas," the Dred Scott decision and Helper's *Impending Crisis* had destroyed the possibility of further compromise with the South.

Some nations had emancipated their slaves before the Civil War, others followed later. Mexico freed her slaves in 1829, and various provisions for emancipation were made by Argentina, Colombia and other Latin American states. Slaves in the Danish and French colonies were emancipated in 1848 and in the Dutch colonies in 1863; Cuban slavery disappeared under the act of 1870 providing for general freedom; Portuguese slavery was abolished in 1878; and freedom in Brazil was decreed by an act of 1888. Moreover from 1861 to 1865 British abolitionists were almost as much interested in the abolition of Russian serfdom as in the freeing of the American slaves.

The approaching end of slavery in the Americas made possible the opening up of Africa as contemplated by Clarkson, Wilberforce and Pitt. Their chief purpose had been to stop the slave trade so that Africa might enjoy an orderly economic development, but success was slow. The colonization of Sierra Leone was relatively a failure; Buxton's Niger expedition of 1840 came to a sad end. Africa remained practically unknown to Europeans, although the French established themselves in Algiers in 1830 and the British were in possession of the Cape of Good Hope. After 1850 missionaries and explorers, Livingstone among them, began to penetrate into Africa. With the development of European imperialism about 1870 the scramble for the complete partition of Africa was intensified. It continued in the readjustments of territory after the Great War. An increasing demand for African products has brought the dark continent into the stream of the world's economic life but has left the problem of the protection of the natives as a task for enlightened world opinion and governmental administration by the European powers. The relative ease with which

the Negro can be subjected to forced labor makes it possible that Africa may even now become a land of peons. The Anti-Slavery and Aborigines Protection Society and similar organizations elsewhere are therefore constantly active in bringing pressure to bear on their own governments and at Geneva to secure conventions giving colored men the maximum amount of protection against exploitation, and to assure their advancement in civilization.

Abolition has been in the past applied mainly to the attitude which aims to stamp out slavery and, by an extension of meaning, serfdom or forced labor. As applied to slavery it has meant at different times and in different contexts a program ranging all the way from the desire merely for gradual manumission of slaves to the complete and immediate extirpation of slavery as an institution. Within these extremes there have been such gradations as plans for the colonization of free blacks, or the redemption and colonization of slaves, or the outlawry of the slave traffic. Among abolitionists there has been uniformity neither of program nor of temper; extremists and pragmatists have mingled their counsels; and it is a testimony to the underlying community of purpose in the New England Anti-Slavery Society that it was able to keep together members as moderate as Samuel May and as uncompromising as Garrison.

FRANK J. KLINGBERG

See: SLAVERY; SERFDOM; PEONAGE; FORCED LABOR; HUMANITARIANISM.

Consult: Ingram, J. K., *A History of Slavery and Serfdom* (London 1895). FOR THE MOVEMENT IN ENGLAND AND FRANCE: Clarkson, Thomas, *The History of the Rise, Progress and Accomplishment of the Abolition of the African Slave-Trade by the British Parliament*, 2 vols. (London 1808); Mathieson, William L., *British Slavery and Its Abolition, 1823-1838* (London 1926); Klingberg, F. J., *The Anti-Slavery Movement in England* (New Haven 1926); Hardy, Charles O., *The Negro Question in the French Revolution* (Menascha, Wis. 1919). FOR THE MOVEMENT IN AMERICA: Woodson, Carter G., *The Negro in Our History* (4th ed. Washington 1927); Adams, James T., *New England in the Republic, 1776-1850* (Boston 1926) ch. xvii; Catterall, H. H. T., *Judicial Cases concerning American Slavery and the Negro*, vol. 1- (Washington 1926-); *A Side-Light on Anglo-American Relations, 1839-1858, Furnished by the Correspondence of Lewis Tappan and Others with the British and Foreign Anti-Slavery Society*, ed. by A. H. Abel and F. J. Klingberg (Lancaster 1927). FOR THE PRESENT DAY SITUATION IN AFRICAN TERRITORIES: Lugard, F. J. D., *The Dual Mandate in British Tropical Africa* (2nd ed. Edinburgh 1923); Buell, R. L., *The Native Problem in Africa*, 2 vols. (New York 1928). See also the biographies of outstanding abolitionists and the bibliographies following them.

ABORTION is the practise of giving birth to the foetus before it has become a viable human being, which is twenty-six weeks after conception. Legally miscarriage is understood to mean the same thing. The practise existed in historic times and with some exceptions is fairly evenly distributed all over the world. Plato and Aristotle approved of it, Aristotle looking at it from the standpoint of a Malthusian check on population. Hippocrates, on the other hand, referred to it in his famous oath in these words: "I will not give to a woman a pessary to produce abortion." Seneca thought it immoral but not a criminal act, while Cicero spoke approvingly of a case in Miletus where a woman was put to death for practising abortion. She had, he said, robbed the father of his hope and of the memory of his name, destroyed the support of the family, deprived the household of an heir and the state of a citizen. The *Digest* and the Justinian code made abortion a criminal offense, but these prohibitions date from a later period and in the Roman Empire, as well as in the Hellenistic world, abortion seems to have been very common among the upper classes. The Christian church opposed the pagan attitude and in its canons abortion became a sin. As a result legal practises in Christian communities under the influence of the church made it a crime punishable with varying degrees of severity, although Anglo-Saxon law considered abortion an ecclesiastical offense only.

Among primitive peoples there are many various reasons for abortion. The same economic motives which are operative in the case of infanticide are operative also in the case of abortion. Psychological motives are also of considerable importance. A significant factor is a fear of disgrace because the child may be born out of wedlock, or because it may be born too soon after marriage, or because it may mean more than a certain fashionably approved number of children, or because the child may appear at the wrong time. No less effective are motives of vanity or the fear of losing the attention of the husband. Under primitive conditions when lactation is a prolonged process, the woman fears that the prescribed continence during that time is undesirable or unpleasant to the husband, and in order not to alienate his affection she will avoid giving birth to a child. Often the difficulties of a nomadic life will make women seek to avoid the additional burden of childbearing. Primitive women never resort to abortion for the protection of their own

health, although some may resort to it in order to escape the pains of childbirth. In India child marriage and frequent early widowhood force women to resort to abortion in order to hide illicit sexual relations. In Persia to give birth to a child means death to an unmarried girl, widow or divorced woman, and accordingly abortion is frequently resorted to. Among Moslems there is an additional reason in the credence given to a pregnant woman's superstitious fear that she may have a bad delivery. For this and other reasons it is claimed that in Moslem countries there are public places for the practise of abortion.

In communities living within the pale of western civilization abortion is also common although, because of the usual legal prohibitions and restrictions, information as to its frequency is difficult to obtain. The motives for the practise are much the same as in primitive communities, except for the one difference that the disgrace which is attached to the unmarried mother is greater among civilized than among primitive peoples. Available information, however, shows that abortion is more common among married than among unmarried women. The explanation of this fact may be found in the lenient attitude of the community toward the married woman as compared with the critical attitude toward the unmarried, making the former far less afraid than the latter to confess to abortive practises.

A survey made among the practising physicians in Maine showed an estimate of 63.5 percent of abortions as criminal; while a nationwide survey among one hundred physicians brought the estimate that one third of all pregnancies throughout the country end in abortion, giving an absolute figure of not less than 100,000. A large number of these are criminal, causing the death of some 6000 women yearly. In Great Britain, exclusive of Ireland and Scotland, "it is estimated that of legitimate pregnancies one in twenty end in stillbirth, and of illegitimate one in ten." Bertillon reported that the proportion in France was 193 to 1000, while Doleris claimed that between 35 and 40 percent of pregnancies in France were interrupted, and Landroy stated in 1912 that there were then more abortions than births, there being 70,000 abortions to 63,000 births in Paris. In France the abortions number 500,000 annually or nearly two thirds of the births. In Denmark the illegitimate stillbirths are twice as numerous as the legitimate. A study made of

criminal abortion in East Prussia indicates a frequency of between $\frac{1}{2}$ and 2 percent of all pregnancies. It is also estimated that in East Prussia from 70 to 80 percent of premature births at all stages of pregnancy are due to interference. Dutch statistics vary from 7 to 33 percent, according to the experience of the obstetrician. Russian statistics indicate about one third, and American experience is said to indicate the same number of purposely interrupted pregnancies.

The East Prussian study mentioned above gives as motives for the practise of abortion in one third of the cases the fact that a new child could not be maintained without lowering or impairing the standard of living of the family. In 25 percent of the cases the families believed they had all the children they could support; in another 25 percent the parents said that they did not wish to be inconvenienced by children; in 13 percent the mothers were unmarried and feared the disgrace attaching to their condition; in 4 percent the illness of the mother was the reason for abortion; and in the remainder of the cases the cause was the mother's fear that she would die during labor or that she would give birth to an unhealthy child. It appears, therefore, that except in cases in which the health of the mother demands it, the practise of abortion in civilized communities is primarily due to motives of material comfort in the case of married women and to the convention of chastity in the case of unmarried women. It is difficult to establish any connection between actual poverty and abortion in civilized society, whatever may be the case in primitive communities. Abortion is due in part to the general attitude of a community toward birth control or the limitation of offspring, and it will be resorted to when and where contraceptive methods are forbidden or not well understood.

Abortion will also be found to be a consequence of the urban middle class attitude toward illegitimacy. Although the dominance of the city has extended bourgeois morality over the whole social structure, it is still true that in communities living under peasant or semi-peasant conditions abortion is by no means general, although it is known and practised. In such communities children are generally considered a blessing and a child is not considered illegitimate when born before marriage, as long as the father is known and it is expected that marriage will soon follow. Nevertheless,

under the pressure of contact with urban conditions, this attitude is disappearing. Church influences are also helping in this direction. The tendency of young men to go to the city for work or for army service removes them from the influence of the local mores and marriage no longer follows the birth of an illegitimate child as a matter of course. In such a situation the mother is likely to resort to abortion because she is afraid of finding herself in disgrace. Moreover, if her parents do not approve of the suitor, the daughter may resort to abortion in order to avoid their wrath.

The urban mores of the middle class have enhanced the value of chastity, and the legitimation of prenuptial conception has become obsolete. Greater impersonality of social relationships, the desire for fewer children, the greater seclusion of women, the increased instability of the male, the possibility of sexual relations for the male in the city without recourse to matrimony or danger of offspring, the larger influence of religio-moral ideals and perhaps also a reaction away from rural customs are additional reasons. As deviations from the current moral code become more offensive, there is a greater necessity to hide such deviations and abortion is one of the means adopted.

As to the methods of abortion, Hovorka and Kronfeld classify them in three groups, as follows: first, mechanical, which includes indirect methods (lifting heavy weights, jumping, bleeding) and direct methods (perforation); second, internal medicine, which may be either purgatives or "special" remedies such as juniper; third, magic practises. They also enumerate 174 objects, instruments and methods found in use in classic and modern times and among primitive and civilized communities.

The general legal and moral attitude in most modern communities is in contrast to that of Soviet Russia. Under the czarist regime the penalties for the aborting mother and for the person who performed the abortion were extremely severe. The Soviet regime abolished these penalties in 1917 and made abortion legal. This new situation soon resulted in a crowding of the hospitals with women suffering from infections resulting from unscientific operations. The government decided to exercise supervision over the matter and in 1920 it became illegal for abortions to be performed outside of hospitals or by unqualified persons. In 1924 it was provided that petitions for abortion should be presented to a local commission composed of

one doctor and a number of members of the local women's organization. The women consider the social and economic conditions of the applicant and decide whether, in her economic condition, she has enough children; the doctor decides the matter from the standpoint of the effect on the mother of the forthcoming delivery. In a city of about 30,000 inhabitants the commission, sitting once a week, received applications from 20 percent of the pregnant women and granted permission to 18 percent. The legalizing of abortion is said to have resulted in no increase in the number of aborting women, as the proportion in Russia is the same as in Germany where abortions are still illegal.

The literature of the problem is shot through with discussions as to the moral justification for the practise. Havelock Ellis has given a full discussion of this aspect, which is essentially in contrast to the social-scientific analysis presented here. Much to the point are the remarks of Iwan Bloch that it is utterly inconsistent for the state to consider as sacred the life of the child before it is born and to punish anyone who interferes with its preservation, and then to consider that same child as a bastard as soon as it is born and for the rest of its life.

MAX SYLVIVUS HANDMAN

See: BIRTH CONTROL; INFANTICIDE; BIRTH RATES; ILLEGITIMACY; CHASTITY; SEX ETHICS.

Consult: Carr-Saunders, A. M., *The Population Problem* (Oxford 1922) and bibliography given there; Westermarck, E., *Origin and Development of the Moral Ideas*, 2 vols. (2nd ed. London 1912-17) vol. i, p. 413-17; Hovorka, O. V., and Kronfeld, A., *Vergleichende Volksmedizin*, 2 vols. (Stuttgart 1908-09) vol. ii, p. 541-43; Ploss, H., and Bartels, M. and P., *Das Weib in der Natur- und Völkerkunde* (11th ed. Berlin 1927) chs. xxvi-xxvii; Temesváry, R., *Volksbräuche und Aberglauben in der Geburtshilfe* (Leipzig 1900); Lecky, W. E. H., *History of European Morals*, 2 vols. (3rd ed. London 1877) vol. ii, p. 20-24; Bloch, I., *Das Sexualleben unserer Zeit* (9th ed. Berlin 1909), tr. by M. E. Paul (London 1910); Hirsch, Max, *Fruchtabtreibung und Präventivverkehr im Zusammenhang mit dem Geburtenrückgang* (Würzburg 1914); Villard, H. G., "Legalized Elimination of the Unborn in Soviet Russia" in *Journal of Social Hygiene*, vol. xii (1926) 294-98; Ellis, Havelock, *Sex in Relation to Society*, *Studies in the Psychology of Sex*, vol. vi (Philadelphia 1913) p. 601-12.

ABOUT, EDMOND (1828-85), French man of letters and popularizer of economic doctrines. He was educated at the Ecole Normale and at the French School in Athens, and devoted himself to literature and to political and

economic writing. As an economic writer he popularized the orthodox laissez-faire doctrine on labor problems, doing this first as a story teller in *Maître Pierre* (Paris 1858) and in the *Lettres d'un bon jeune homme* (Paris 1861), and then in a more direct and didactic manner in *Le progrès* (Paris 1864), *L'A B C du travailleur* (Paris 1868), and *Le capital pour tous* (Paris 1868). In his political writing he is known chiefly for his *La question romaine* (Paris 1859, tr. by H. C. Coape, London 1859), a bitter denunciation of the regime of the papal states and a plea for nationalism in religion. Though About was on friendly terms with the government of the empire, the book had to be published in Brussels and was forbidden admission into France. After the fall of Napoleon About accepted the republic and became the editor of the review, *Le 19^e siècle*, which he made an organ of anticlericalism and conservative republicanism. He also published an extremely nationalistic book on *Alsace* (Paris 1873). His work in literature won him membership in the French Academy (1884). A selection of his letters was published in *La nouvelle revue*, 3rd series, vol. xxi (1911) 289-322.

BENJAMIN GINZBURG

Consult: Deschamps, Gaston, "Edmond About" in *La revue hebdomadaire*, vol. xxxiii (1924) no. xi, 164-86; Colonel Gruau, "Le centenaire d'Edmond About" in *La nouvelle revue*, 4th series, vol. xciii (1928) 3-12 and 123-31.

ABOVIAN, KHACHATOUR (1804 or 1805-48), also known as Khachatour Andonian Aboviantz, founder of modern Armenian literature and great pioneer in popularizing education. He was born in a small village near Erivan, the son of well-to-do and distinguished parents, and enjoyed the advantages of the best schooling of his time. In his early years he became intimately associated with several German scientists traveling in the Caucasus. In 1830 he studied at Yuriev (Dorpat) University on a fellowship. He returned to Tiflis six years later and became headmaster of a school; later he occupied a similar position at Erivan.

In 1839 he composed a primer for beginners to make teaching intelligible and learning attractive in the elementary grades. This was followed in 1841 by *Verk Haiasdami*, a novel written in a vividly descriptive style, interspersed with folk songs and portraying faithfully the political and economic conditions under which the common people lived and suffered. He also wrote fables in verse, poems, short plays

and essays, many of which served as reading texts in schools. His literary as well as his pedagogic work was done in the Armenian vernacular as distinguished from the "written language" of the time, which was ponderous and unintelligible to the masses. Abovian's activity served thus as a turning point in the method of Armenian education and opened the modern era in Armenian literature. His works, in Armenian, were collected and published by Isaac Zhamhariantz (Moscow 1897).

LEON ARDZROONI

Consult: Haxthausen, A. von, *Transkaukasien* (Leipzig 1856), tr. by J. E. Taylor (London 1854) p. 203-46.

ABRAHAMS, ISRAEL (1858-1925), Anglo-Jewish teacher, author and communal worker, was educated at Jews' College and at the University of London and from 1899 until 1905 acted as senior tutor at the former institution. He also was reader in Rabbinics at Cambridge University until his death. One of the founders of the Jewish Religious Union, later the Liberal Jewish Synagogue, he acted as lay preacher at frequent intervals. Together with Claude G. Montefiore he was the founder and joint editor of the *Jewish Quarterly Review* from 1888 until 1907 and in this capacity had a far reaching influence on the development of Jewish learning throughout the English speaking world. He was also one of the founders of the Jewish Historical Society of England, and until his death edited the society's *Transactions*.

Abrahams was a prolific writer and possessed the rare ability to popularize abstruse subjects. He published a considerable number of volumes of essays on various phases of Jewish history and literature. His best known book is his *Jewish Life in the Middle Ages* (London 1896), a pioneer work in the field of Jewish social history. Abrahams utilized the *Responsa* of the mediaeval rabbis for the history of that period and, after the works of Berliner and Gudemann, his was the first attempt to give a composite picture of Jewish life in all countries during the Middle Ages. His *Studies in Pharisaism and the Gospels* (Cambridge, Eng. 1917; 2nd series, Cambridge, Eng. 1924) marks a distinct step in advance in the treatment of the problem of the relations of the Gospels to rabbinic literature.

JULIUS H. GREENSTONE

Consult: Loewe, Herbert, "Israel Abrahams" in *American Jewish Year Book*, vol. xxviii (1926) 219-34; introductory articles by S. S. Wise, Dudley Wright, M. H. Harris, F. J. Foakes-Jackson, Nathan

Krass and C. G. Montefiore in *Jewish Studies in Memory of Israel Abrahams* (New York 1927) p. xi-lxvi.

ABSENT-VOTING. The expansion of business enterprises from purely local operations into statewide, interstate and even international activities during recent decades, the multiplication of itinerant vocations, the greatly augmented number of state and federal officials and employees, the enormous influx of students into colleges and universities, together with the ease and rapidity of modern means of transportation and intercommunication, have entailed the absence of thousands of eligible voters from their legal voting residences throughout much of the year, often including the days when primaries and general elections occur.

Until the enactment of absent-voting laws, beginning with Vermont (1896) and Kansas (1901, 1911), such voters were in effect disfranchised if unable to appear in person at the polls in their home precincts on primary and election days. To remedy this defect in our election system, all but three states (Connecticut, Indiana and Kentucky) now (1929) have laws which permit such absentees to mark an official ballot (a) at home, in anticipation of absence on election day, or (b) at some other place in the voter's home state, where he may happen to be on the day of election, or (c) at some point outside of his own state. The ballot thus marked is mailed, or delivered in person, either to the election officials in the voter's home precinct, there to be counted on election day, or to a county canvassing board or official, to be counted at the official canvass shortly after the election.

The earliest absent-voting laws were exclusively for the benefit of citizens serving in the Union army during the Civil War; and at least two such laws (in Maine and Pennsylvania) are still on the statute books. At the present time, however, only four states (Maryland, New Jersey, Pennsylvania and Rhode Island) restrict the privilege of voting *in absentia* to persons in the army or navy. While most of the mobile classes of the population are now taken care of, no state permits absent-voting, indiscriminately, by all classes of civilians. Most laws prescribe that the voter shall be "unavoidably" or "necessarily" absent, or absent "because of his duties or occupation." The law of Michigan is more specific and generous than most of such laws, extending the privilege of absent-voting to persons in the actual service of the United

States or of the state, students in institutions of learning, public-school teachers, persons enrolled in military or naval training camps, members of the legislature while attending legislative sessions, railway employees, commercial travelers, sailors engaged or employed on the Great Lakes or in the coastwise trade, and "persons necessarily absent while engaged in the pursuit of lawful business or recreation." Although absence from the election district is a usual prerequisite, about fourteen states, including Michigan, allow absent-voting by persons detained at their homes by illness or disability.

The meager statistics available indicate that comparatively few voters actually take advantage of the absent-voting laws. The explanation is largely to be found in the newness of most of these laws and the failure of election officials and party workers to give adequate publicity to the opportunities which they hold out.

Absent-voting legislation has been held unconstitutional by the state supreme courts in Kentucky (1921) and, as it applies to the civilian population, in Pennsylvania (1925).

P. ORMAN RAY

See: REGISTRATION OF VOTERS; NON-VOTING; ELECTIONS; SUFFRAGE.

Consult: Benton, J. H., *Voting in the Field* (Boston 1915); Rocca, Helen M., *A Brief Digest of the Laws Relating to Absentee Voting and Registration* (Washington 1928); Ray, P. Orman, *An Introduction to Political Parties and Practical Politics* (3rd ed. New York 1924) p. 280-87, 583-84; Pollock, J. K., Jr., "Absent-Voting, with Particular Reference to Ohio's Experience" in *National Municipal Review*, vol. xv (1926) 282-92.

ABSENTEE OWNERSHIP. Separation of the place of residence of property owners from the location of the property from which they derive an income and which they ultimately control gives rise to economic and social problems of wide ramifications. The subject seems first to have attracted serious attention in connection with conditions in pre-revolutionary France. Here one of the important factors in the situation was the removal of the higher nobility to the capital after the final triumph of the crown over feudalism in the mid-seventeenth century, and their transformation into elegant, but parasitic and extravagant courtiers. It must be observed that clear recognition of absenteeism as an active cause of the discontent which culminated in the revolution is much easier to find in the analyses of later historians than in the writings of the period, though antipathy to the

bailiffs who managed the estates is one of the recurring notes in the *cahiers* of 1789.

Historically absenteeism is more famous, or at least has received much more discussion at the hands of recognized economists, in connection with the Irish question, which was so important during the nineteenth century. More recently a similar agitation has been carried on in regard to India. Around the middle of the century it was estimated that as much as one third of the entire produce of Ireland was sent out of the country in payment of rents to absentee proprietors. The leading economists of the liberal school took an active interest in the Irish question, and the effects of absenteeism were argued especially by McCulloch, Longfield and Senior. McCulloch held that it is a matter of indifference whether proprietors live and consume their incomes in the country or abroad. Longfield, lecturing at Dublin in 1834, admitted the validity of much of the orthodox liberal reasoning, particularly as against popular arguments, such as that of Swift, to the effect that the country was being drained of its gold and silver. But he endeavored to show that absenteeism is disadvantageous in various ways. Senior took a somewhat intermediate position, but nearer to the indifference side. Longfield's reasoning as to effects on prices and costs raises issues of general theory not yet settled, but he showed a good deal of insight in emphasizing social considerations. He particularly stressed the influence on the quality of agricultural management due to the interest a resident will naturally take in his estate, and also the influence of the proprietor's leadership and example in community affairs and mode of life. He held it to be axiomatic that any influence exerted would be for the good, since any bad example or suggestions would be ignored. It is of interest that Adam Smith inclined to the opposite view, that the residence of wealthy spenders in a community tends to corrupt rather than to improve social morale.

In the past two generations the question of farm tenantry has received extensive notice in the United States, as the general problem of land tenure has always and everywhere. But factual study shows that conditions in America do not involve on a considerable scale the holding of land for investment by absentees. In this country absenteeism is more discussed in connection with "industry" and, in particular, the separation of investment from control through various modern devices of corporate

organization and finance, holding companies, classification of securities, banker domination, etc. The high point of the attack on grounds of general social effects is perhaps Thorstein Veblen's *Absentee Ownership*. Currently the discussion of branch banking and chain stores exemplifies argument or prejudice in one direction, opposite to that shown in the general scramble of communities to secure immigration of capital or its owners on nearly any terms.

Allusion has already been made to some of the theoretical issues raised by the general question of absenteeism. Such ideas as that of draining a community of its money may of course be dismissed. In the logic of abstract individualistic economics, it is a matter of indifference to all other individuals where any particular individual resides. Even the matter of men's pleasure or displeasure in each other's society would theoretically find effective expression in the competitive determination of places of residence (though only to the extent that such feelings are mutual). In this field, "as in others, the classical economists reasoned awkwardly and often erroneously to conclusions which have a sound theoretical basis, which actually represent the main long-run economic tendency, and which are generally correct in their practical emphasis as against ruling popular fallacies. But, in the first place, some of the implicit assumptions of the individualistic theory are more or less contrary to fact and reasonable possibility and, in the second place, there are questions of community interest which are not practically reducible to individualistic terms.

Relative to the first head are some consequences of mobility and immobility. Any measure which increases the population and volume of business in a community naturally works to the direct economic advantage of the owners of immovable wealth in that community, and more or less to the advantage of the numerous other sorts of persons who have localized vested interests. Some productive activities (some "industries") are located, either by necessity or because of decisive advantage, near immovable natural resources or other productive conditions; some follow the residence of the consumers—this is true strictly of personal services and in varying degree of final manufactures; some can without great difference in technical efficiency be moved about inside wide limits. Consequently the issues involved in absentee ownership overlap exten-

sively with those involved in the broader questions of interregional economic relations, specifically, "protectionism" in all its forms. There is no doubt that Senior followed a sound intuition in making the effect of absenteeism depend to a considerable degree on whether conditions in the "home" country are such that the income would be transferred in the form of raw produce or in that of manufactured goods.

Of community interests which do not find adequate expression in contracts between individuals the most immediate and direct is the political, including taxation and military service. Neither of these goes absolutely with location, but in general that connection holds. Distribution of power to tax and of the proceeds of taxation between the community which is the source of the wealth and that in which the owner lives was one of the early questions taken up by the League of Nations, and is a source of growing conflicts of interest within all large nations; it holds possibilities of an especially acute sort for a federal system such as that of the United States, and in general confronts with a theoretically insoluble problem all efforts to combine local autonomy in government with political unity on a broad basis.

Less tangible but equally important consequences of place of residence are expressed, in their extreme development, in the whole difference between a rural and an urban civilization. Even in modern industrial nations cities are predominantly aggregations of consumers, and of the service occupations and industries which supply the immediate wants of consumers. And since in a broad sense civilization is an urban phenomenon it is also a phenomenon of absenteeism in its manifold variations. The political effects obviously depend on the extent of the separation of political jurisdiction between the localities of residence of owners and of the property itself.

A phase of absenteeism which has received much attention first and last is the effect on labor policy. It is undoubtedly true that a humane attitude on the part of employers, in opposition to their purely economic interest, is more likely to go with some personal contact—though the reverse may hold in some cases. More important, undoubtedly, is the greater likelihood of an *intelligent* policy of control, working to the mutual economic advantage of employer and employee, when there is direct contact without the intervention of a managerial bureaucracy. But again, a salaried adminis-

trative staff may be more, and not less, intelligent in personnel policy in comparison with ultimate proprietors. It is difficult to generalize, and if independence and self-reliance are recognized as ethical values and paternalism as a danger, it is clear that "there are two sides" to the whole question of personal relations versus the cash nexus.

FRANK H. KNIGHT

See: LAND TENURE; FRENCH REVOLUTION; LATIFUNDIA; FARM TENANCY; RURAL SOCIETY; INVESTMENT; FOREIGN INVESTMENTS; CORPORATION; HOLDING COMPANY; LOCALIZATION OF INDUSTRY; DOUBLE TAXATION; ECONOMIC ORGANIZATION.

Consult: ON PRE-REVOLUTIONARY FRANCE: Taine, H. A., *L'Ancien régime*, 2 vols. (23rd ed. Paris 1900), tr. by J. Durand (New York 1896); Lowell, E. J., *The Eve of the French Revolution* (4th ed. Boston 1925); Sée, Henri, *La France économique et sociale au XVIII^e siècle* (Paris 1925), tr. by E. H. Zeydel as *Economic and Social Conditions in France during the Eighteenth Century* (New York 1927).

ON IRELAND: Johnston, C., and Spencer, C., *Ireland's Story* (Boston 1923); Lecky, W. E. H., *Leaders of Public Opinion in Ireland*, 2 vols. (3rd ed. London 1903); Smith, Goldwin, *Irish History and the Irish Question* (New York 1905).

IN GENERAL: Longfield, M., *Three Lectures on Commerce and One on Absenteeism* (Dublin 1835); Senior, N. W., *Political Economy* (6th ed. London 1872); Veblen, T. B., *Absentee Ownership and Business Enterprise in Recent Times; the Case of America* (New York 1923).

ABSENTEE TAXATION. *See* TAXATION.

ABSENTEEISM (LABOR) refers to time lost in industrial establishments by avoidable or unavoidable absence of employees. Time lost by strikes and lockouts or by lateness amounting to an hour or two is not usually included. Absenteeism is measured either in the percentage of time lost as compared with the total scheduled time of work including authorized overtime, or more popularly in the number and fraction of working days lost per year. Since working days approximate three hundred per year, the percentage of time lost may be translated into days lost per year by multiplying by three.

A further and more important complication in measuring absenteeism lies in the lack of any standard upper limit to the period of absence. When an employee has been absent, say nine months, some establishments may continue to keep his name on the books and to add in his lost time, while other establishments may consider that he has left his employment and will simply "write him off" as a case of

labor turnover. The lack of any definite limits where absence passes into labor turnover restricts the use of statistics of absenteeism in the comparison of different establishments, different industries or different countries.

If a limit of six months is taken arbitrarily, then the "unavoidable" loss of time due to sickness and non-industrial accidents may be estimated for England and America as averaging about 1.85 percent for men and 2.20 percent for women or about five and a half working days per year for men, six and a half for women (Florence, p. 202). This rate varies seasonally, sickness being considerably higher in winter than in summer. The other elements in unavoidable absenteeism are more difficult to average. Absence due to industrial accident varies greatly from industry to industry. In the metal industries of both America and England the time lost by men on account of industrial accidents is about one and a half days per year. Probably the accident rate is roughly the same on railways but two or three times as much in coal mines and less than half in textiles and other manufacturing industries. Adding all elements in unavoidable absenteeism, male employees may be expected to lose from six to ten and a half working days per year, i.e. 2 percent to 3.5 percent of their time, according to the industry, in unavoidable absence of not more than six months' duration.

"Avoidable" absence, that is, absence not due to sickness, accident or family circumstances, is yet more variable, and the *total* absence found by actual record during the period of the war in various English establishments ran from 5.3 percent to 14.3 percent of the total working time in the case of men and from 7.6 percent to 12.3 percent in the case of women (Florence, p. 189). In post-war days the Royal Commission on the Coal Industry reported 22½ days lost by coal miners in 1924 due to all personal causes, i.e. almost 8 percent of the total working time, but the proportion varied widely from district to district, and in the intensive investigation of the Industrial Fatigue Research Board absenteeism in a group of ten collieries was found to average 12.5 percent.

The chief source of absence statistics in America are not government inquiries but the records of individual establishments. Establishments keeping and publishing such records would naturally be the more efficient, and hence it is not surprising to find a lower total absence rate centering around 5 percent of scheduled

time, with percentages still lower among office staffs and in "model" establishments as a whole. Where government inquiries were made, however, such as in southern cotton mills and in shipyards during the war, rates of 11, 13 and 18 percent are quite comparable to the British extremes (Douglas). But in the Far East such statistics as have been published show a wide divergence from rates in the western countries, indicating an altogether different type of economy. The proportion of absence in Japanese coal mines runs as high as 33 percent for men and 45 percent for women.

Absenteeism is a serious problem in factory management because it involves heavy additional expenses. Either reserves and understudies must be held in readiness to take the place of the absent, or the overhead cost of idle equipment must be faced. Industrial employees do not usually ask leave to be absent beforehand or even give notice during an absence as to its expected length, so that the management is generally left in uncertainty as to the probable duration of any employee's absence and cannot take appropriate measures to fill the gap. The first obvious remedy which a wise personnel management should adopt to reduce the heavy expenses of absenteeism is therefore to encourage notification, especially in cases such as sickness when the duration of absence is likely to be long; and where other personal and family circumstances, e.g. illness of children in the case of married women employees, make absence unavoidable, to grant leave of absence liberally. A second type of remedy open to the factory management is to reduce the unavoidable absence due to sickness and industrial accident by recourse to the programs of the industrial hygiene and safety movements.

The wide margin between total and unavoidable absenteeism points to a third line of attack, namely the reduction of avoidable absenteeism. To some extent regularity of attendance may be encouraged by bonuses and other pecuniary inducements; but more can be effected by removing the underlying causes of absence. Absenteeism is probably a natural human reaction to the routine of the modern factory. There is a maladjustment between man's instincts and desires and the regular working habits that are imposed upon him. This routine can be relaxed or modified by granting vacations with pay, shortening or redistributing scheduled hours, having employees live nearer their work, and adjusting the physical conditions of the plant,

especially noise and ventilation. There is probably considerable physiological and psychic fatigue not sufficient to make a person recognizably ill, yet reducing the feeling of fitness and inducing an aversion to work. Minor and often avoidable physiological complaints appear to be a fertile source of the markedly higher rates of absenteeism found among women members of office staffs.

P. SARGANT FLORENCE

See: LABOR TURNOVER; ACCIDENTS, INDUSTRIAL; MORBIDITY; FATIGUE; INDUSTRIAL HYGIENE; SAFETY MOVEMENT; PERSONNEL MANAGEMENT.

Consult: Stone, E. L., and Cox, C., "Absenteeism in Industry: A List of References" in U. S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*, vol. xxv (1927) 190-97; Princeton University, Industrial Relations Section, *Memorandum: Reduction of Absence and Tardiness* (mimeographed bibliography) (Ann Arbor 1928); Douglas, P. H., "Absenteeism in Labor" in *Political Science Quarterly*, vol. xxxiv (1919) 591-608; Florence, P. Sargent, *Economics of Fatigue and Unrest* (London 1924) ch. vii; Keir, J. S., "The Reduction of Absences and Lateness in Industry" in American Academy of Political and Social Science, *Annals*, vol. lxxi (1917) 140-55; Vernon, H. M., *Industrial Fatigue and Efficiency* (London 1921) chs. viii-ix; Watkins, G. S., *Labor Management* (Chicago 1928) ch. xiii; Fisk, E. L., and Sharp, C. T., "Health of Industrial Workers" in American Engineering Council, *Waste in Industry* (New York 1921) ch. xv; Vernon, H. M., and Bedford, T., "A Study of Absenteeism in a Group of Ten Collieries" in Great Britain, Industrial Fatigue Research Board, *Report no. 51* (London 1928); Best, E. L., "Lost Time and Labor Turnover in Cotton Mills" in U. S. Women's Bureau, *Bulletin no. 52* (Washington 1926).

ABSOLUTISM in the history of political theory has stood for two doctrines: the absolutism of the seventeenth and eighteenth centuries and Hegelian absolutism. These doctrines, separated in time and appearing at first sight to differ in substance, have yet, as we shall see, a definite historical connection. Absolutism in the seventeenth and eighteenth centuries was a doctrine suited to the absolutist monarchies which had been gradually coming into being since the Reformation. As a theory (e.g. in Hobbes) it applies to all governments—oligarchies and democracies as well as monarchies—but in practise its protagonists are always thinking of monarchies. It is the doctrine of the absolute right of the ruler, i.e. the affirmation that the ruler is bound neither by the laws of nature nor by any kind of moral or legal limitation. It is connected obviously with the doctrine of sovereignty which, first formulated with

limitations by Bodin in the sixteenth century and given its classical definition by Hobbes in the seventeenth, was, as Jellinek says, a negative protest against the limitations imposed upon the growing nation states by the empire, the church and the feudal rights of the nobility. The nation states of Europe, as they were consolidated in the sixteenth and seventeenth centuries, were absolutist in the sense that they were released from these limitations. The ideal of a unified political organization for Christendom was finally abandoned and the absolute independence of the several sovereign states was recognized; the secularity of the state, its independence of, or superiority to, the church, and the omniscience of the central government over old standing customs, privileges and private jurisdictions were the more outstanding features of this new type of state.

But the distinguishing characteristic of the new state and the essence of absolutism is the state's relation to law. The mediaeval state rested on law. The monarch was above positive law but subject to the law of nature. This law of nature was conceived of as something fundamental and unalterable even by God, on the acceptance of which all society depended. Most sixteenth century writers, however much they may assert that the power of government is free from the more external limits, take for granted the overriding compulsion of the law of nature. It was Machiavelli's repudiation of such compulsion that made him so revolutionary a figure. But when the new movement comes to its maturity in Hobbes, the laws of nature are reduced to mere rules of expediency—with the far reaching consequence that for the view that social relations, and with them the state, are founded on law, is substituted the view that law is thought to be dependent on the state. These rules, says Hobbes of the laws of nature, men used improperly to call laws. For law is the word of him who by right exercises command over others. It is thus regarded as a command and as nothing else: its authority comes not from its content but from the authority of the person who commands it. This new attitude, as Figgis has pointed out, has its counterpart in contemporary theology. To Calvinist and Jesuit alike, actions are right because God commanded them—they are not commanded by God because they are right.

From this new conception of law all absolutism follows. If for the existence of law an *a priori* relation of commanding and obeying is

necessary, then personal authority is the basis of the state. To such authority there can be no limitations: for the only possible limitations would be another commander, which would mean anarchy; or the universal acceptance of some principle that should either delimit the spheres of different authorities or limit the commands of the one sovereign, which would mean that the law was not a command.

The basis for that personal authority may be expediency, as in Hobbes, or religion, as in the theory of the divine right of kings. The inner compulsion of absolutism is always the same. Man cannot be trusted to recognize and interpret any general moral or social principles; and that being so the only way in which the agreement and conformity necessary to government may be attained is the recognition by all of the authority of some person or persons who shall have entire power to do all that is necessary for society. There is paradoxically a connection between absolutism and toleration, as is clear from Hobbes. Agreement to obey an arbiter is the refuge of those who cannot agree on moral principles to guide their conduct.

Hobbes' absolutism was supposed to be compatible with other forms of government than monarchy. Government might be of one or more persons: its powers must be absolute in all cases. The monarchical absolutism of the divine right of kings was succeeded by the democratic absolutism of Rousseau, who marks the transition from the first kind of absolutism to the second. Rousseau takes for granted that law is a command but he also assumes that no individual has a right to command others. He therefore looks for an entity with the necessary authority to command, whose authority is to be compatible with the freedom of the individual citizens, and he finds what he seeks in the community or the general will. The omniscience and unlimited powers of the monarch are now transferred to the general will. This democratic absolutism upholds the complete independence of the nation state and the complete authority of this state over all other associations. Nevertheless it has to make a distinction between the actual government and the general will. Rousseau's doctrine is thus a return to the notion of government being limited by law, although his assumption that law is a command obscures the fact of this return. Rousseau's general will is really not a person who issues commands but a principle.

Rousseau's doctrine of the sovereignty of the

general will was restated by Bernard Bosanquet in his *Philosophical Theory of the State*. Absolutism for Bosanquet, as for Bradley and other English Hegelians, has primarily a metaphysical meaning. Kant had shown that it is the nature of reason to seek for the unconditioned. For the Hegelians who made reason constitutive and not, as Kant insisted it should be, merely regulative, this meant that truth was to be found only in the unconditioned or absolute. Hence the distinction between appearance and reality based on the principle that what is in any way conditioned is so far only appearance. When this general point of view is applied by Bosanquet to political theory it easily takes up the suggestion from Rousseau that the sovereignty of the state can only reside in the community as a whole and that against the claims of such sovereignty there can be no limitations. The view that law is a command with its consequent denial that sovereignty can be in any way limited is retained by the conception of the state as a personality.

This modern absolutism involves a confusion between the state and society, and tends to ascribe power to political government over other associations, as for instance the church, on the ground that the state is society as a whole. It has been much criticized by recent political theorists, particularly Hobhouse, Laski and MacIver, on that score. It certainly does not do justice, moreover, either to international cooperation or to the original claim upon the loyalty of the individual made by such an institution as the church. The omniscient, entirely independent state which absolutism in all its forms presupposes no longer exists. It may perhaps be said that the modern state is returning more and more to a conception of political society more akin to the mediaeval than to that of which absolutism is the expression. It insists on the reality of the notion of a world society; it thinks of power as always conditioned by law or agreed principle; it is federalist rather than unitary; and it is no longer satisfied with the conception of law as a command. With all these positions absolutism in any sense is incompatible.

A. D. LINDSAY

See: SOVEREIGNTY; AUTHORITY; AUTOCRACY; MONARCHY; DIVINE RIGHT OF KINGS; STATE; PLURALISM.

Consult: MacIver, R. M., *The Modern State* (Oxford 1926) p. 133-45, 426-38; Figgis, J. Neville, "Political Thought in the Sixteenth Century" in *Cambridge Modern History*, vol. iii, ch. xxii; Allen, J. W., *A*

History of Political Thought in the Sixteenth Century (London 1928); Coker, F. W., "Pluralistic Theories and the Attack upon State Sovereignty" in *A History of Political Theories, Recent Times*, ed. by C. E. Merriam and H. E. Barnes (New York 1924) p. 80-119; Lindsay, A. D., "The State in Recent Political Theory" in *The Political Quarterly*, vol. i (1914) 128-45; Barker, Ernest, "The Discredited State" in *The Political Quarterly*, vol. ii (1915) 101-21; Willoughby, W. W., "The Juristic Conception of the State" in *American Political Science Review*, vol. xii (1918) 192-208; Laski, H. J., *A Grammar of Politics* (New Haven 1925) ch. vii.

ABSTENTION FROM VOTING. *See* NON-VOTING; OBSTRUCTION, PARLIAMENTARY.

ABSTINENCE is the term employed by Senior and, following him, by later economists of the English classical tradition to designate the peculiar element in the cost of commodities which is involved in the use of capital in production. Since to the older economists cost meant sacrifice or pain, abstinence may be defined as the productive sacrifice for which the distributive share of interest (in the older usage, profit) is the remuneration. There were more or less definite anticipations of Senior's doctrine by earlier writers, especially by Scrope, who used the term in 1833, and perhaps by G. Garnier (*Abrégé élémentaire des principes de l'économie politique*, Paris 1796).

Lassalle and others have effectively ridiculed the abstinence pain of the wealthy capitalist as a justification for the payment of interest; but this has no bearing on the notion of an equivalence between reward and sacrifice, at the margin, for each individual saver, as a causal explanation. The English economists, prior to the rise of the Austrian school, did not use the abstinence theory to develop a quantitative explanation of the rate of interest—a fact connected with the generally undeveloped state of their distribution theory in comparison with the theory of value. According to Senior, abstinence sets a minimum level of "profit," but this, like his maximum, is quite indeterminate, and the notion that some interest is a necessary inducement to saving was accepted doctrine before he wrote (cf. especially James Mill, but also Smith, Ricardo *et al*). Ricardo, moreover, has recognized that the value of commodities is affected positively by the length of time expended in production, independently of other causes. Jevons, the English pioneer in deriving value from utility in place of cost, discussed the psychology of present and future satisfactions

in connection with the theory of utility; but though he ostensibly reconciles his theory of capital with the abstinence concept, the theory actually runs in terms of the productivity of investment (*Theory of Political Economy*, 4th ed., London 1911, p. 71 *et seq.* as contrasted with p. 233 and p. 247).

The modern discussion of capital and interest dates from the publication of Böhm-Bawerk's first (historical) volume in 1884. This writer gave an elaborate development of the theory of preference of present to future goods and made one of three main grounds for this preference the "technical superiority" of the former, due to the greater effectiveness of roundabout processes in production. Since that time discussion has been centered on the two main issues: first, whether this technical superiority of present goods is different in principle from the productivity of capital rightly interpreted; and second, whether the view of a non-technical, psychological preference is different in principle from the doctrine of abstinence. Regarding the latter distinction Böhm-Bawerk defended to the last his ingenious contention of 1884 that abstinence cannot be treated as a sacrifice additional to the labor of producing a capital good, and that the discount of futurity is a separate, in fact contradictory, principle. Of the two leading American advocates of a psychological in opposition to a technological explanation of interest, Professor Fisher has supported Böhm-Bawerk, while Professor Fetter adopts and uses the abstinence notion without protest. The majority of economists, however, seem to agree with Alfred Marshall that the distinction is fallacious, a matter of words or of psychological subtlety. Commonly, however, they prefer the term "waiting" to "abstinence," a substitution first suggested by Macvane in 1887. The view is that this waiting, abstinence, or discount of future enjoyment, is the chief factor limiting saving and hence determining the supply curve for capital.

Aside from the question of the relations between technological and psychological factors in the capital and interest situation, the psychological theory itself is admittedly in an unsatisfactory state. J. B. Clark and others have suggested that a low rate of interest might stimulate more saving than a high rate. Cassel holds that the facts involve a connection between the interest rate and the length of human life. Inasmuch as at the ordinary rate

of interest it is doubtful whether on the average invested savings replace themselves with an increase during the lifetime of the saver, and in view, further, of the large proportion of the income from capital which is constantly reinvested, it is arguable that the term abstinence is after all more descriptive than waiting. And the same reasoning casts doubt over the realism of the whole view of the psychology of saving as a comparison between present and future enjoyment. In this field of economic behavior an institutional interpretation seems especially applicable.

Even from the standpoint of rationalistic economics the abstinence-time-preference theory needs to be carefully stated. In a world where opportunities are notoriously open to all to secure through technical investment larger quantities of goods in the future in exchange for a present sacrifice, the rational individual must carry saving to a point at which there is a psychical cost equal to the gain. But this does not make abstinence or time preference the cause of the gain. It seems dangerously near to "idle speculation" to theorize in general terms as to what behavior would be in the absence of this fact, or to say what behavior is to be regarded as rational in the face of all the unknown quantities which affect future needs and future resources. Moreover the bulk of the capital supply actually comes from "postponement" of consumption until after death. It is surely inaccurate to describe as a preference of present to future enjoyment (or a sacrifice incurred in postponement) the fact that men will not voluntarily postpone all consumption to the indefinite future. The only workable zero-point for reckoning time preference is that of a uniform rate of consumption through the individual life, or the responsible or "normal" part of it, and on this basis the view that civilized man typically looks ahead excessively and "borrows trouble" is abstractly as arguable as the reverse contention. It is to be observed that even a rate of consumption is not a magnitude susceptible of objective measurement.

It is fairly safe to say that the most fruitful approach to the problems affected by abstinence or related conceptions is a realistic analysis of the conditions of supply and demand for consumable goods, for the instrumental or indirect goods behind these, and ultimately for "capital" and "loanable funds." Although there is now much disagreement among competent economists regarding ultimates, the drift seems to be

toward a view which gives a relatively minor place to the psychological comparison of present and future enjoyments as an element in the situation at a given moment. For it is to be noted, finally, that beyond question industry could absorb vast amounts of capital at a low interest rate (elastic demand), while no possible change in conditions affecting saving can in a short time make a large difference in the aggregate supply of productive capital.

FRANK H. KNIGHT

See: ACCUMULATION; SAVINGS; ECONOMIC INCENTIVES; CAPITAL; INTEREST; ECONOMICS.

Consult: Senior, N. W., *Political Economy* (6th ed. London 1872); Lassalle, F. J., *Herr Bastiat-Schultze von Delitsch* (Berlin 1874); Böhm-Bawerk, E., *Kapital und Kapitalzins*, 2 vols. (4th ed. Jena 1921), 1st ed. tr. by W. Smart as *Capital and Interest* (London 1890) and *Positive Theory of Capital* (London 1891), and appendix to 2nd ed. tr. by W. A. Scott and S. Feilbogen as *Recent Literature on Interest (1884-1899)* (New York 1903); Carver, T. N., "The Place of Abstinence in the Theory of Interest" in *Quarterly Journal of Economics*, vol. viii (1893-94) 40-61; Cassel, G., *The Nature and Necessity of Interest* (London 1903); Fisher, Irving, *The Rate of Interest* (New York 1907) p. 43-52; Fetter, F. A., *Economic Principles* (New York 1915) ch. xx, xxi; Marshall, Alfred, *Principles of Economics* (8th ed. London 1922) bk. iv, ch. vii, §§ 8-10, bk. vi, ch. vi, § 1, Appendix E, §§ 332-33.

ABUL FAZL ALLAMI (1551-1602) was the son of the Shaikh Mubārak, who first suggested to Akbar, the Mogul emperor, that he should become the spiritual head of his empire. The emperor, after coquetting with Hinduism, Jainism, Zoroastrianism and Christianity, finally in 1552 established as the official religion the Dīn Ilāhī, or Divine Faith, a kind of theosophy of which Abul Fazl was the high priest. This excited the rage of orthodox Moslems, and in 1602 he was brutally murdered at the instigation of Prince Selīm. Abul Fazl was one of the emperor's most intimate friends, "the King's Jonathan," say the Jesuits, and for his encyclopaedic learning and courtly attainments he has been compared to Francis Bacon.

Of his two great works, the *Akbar Nāma* (Reign of Akbar) (3 vols. Calcutta 1877-86; tr. by H. Beveridge as *Akbar Nāma*, pts. i-xiii, Calcutta 1907-21) is spoiled by its tendency toward fulsome panegyrics; the monumental *Ain-i Akbari* (Institutes of Akbar) (2 vols. Calcutta 1872-77; admirably translated by Blochmann and Jarrett as *Ain-i Akbari*, 3 vols. Calcutta 1873-94) is, on the other hand, really a gazetteer of Hindustan, and is one of the most

amazing things of its kind in the world. Its compilation occupied over seven years. Books I and III describe in detail Akbar's court and administrative system, with a statistical account of the empire. Nothing is omitted; prices, wages, coinage, architecture, manufactures, are carefully tabulated. Book II contains an admirable chapter on regulations for education, laying down for Indian schools an elaborate curriculum which includes mathematics, logic, agriculture, political science, history and theology. Books IV and V are devoted to a minute and learned account of the religion, philosophy and customs of the Hindus, and a collection of "Happy Sayings" of Akbar, of unique value for the light which they throw upon the emperor's character and views. This book has been criticized for showing Akbar's empire in too favorable a light, but even allowing for this, it is a work of the greatest importance for the study of the social and economic history of India in the sixteenth century.

H. G. RAWLINSON

Consult: Smith, Vincent A., *Akbar, the Great Mogul* (2nd ed. revised, Oxford 1920).

ACADEMIC FREEDOM is the freedom of the teacher or research worker in higher institutions of learning to investigate and discuss the problems of his science and to express his conclusions, whether through publication or in the instruction of students, without interference from political or ecclesiastical authority, or from the administrative officials of the institution in which he is employed, unless his methods are found by qualified bodies of his own profession to be clearly incompetent or contrary to professional ethics.

The freedom of opinion, speech and publication claimed for the university teacher is not in extent significantly different from that usually accorded to other citizens in modern liberal states, and the reasons for maintaining it are in part the same. It is peculiar chiefly in that the teacher is in his economic status a salaried employee, and that the freedom claimed for him implies a denial of the right of those who provide or administer the funds from which he is paid, to control the content of his teaching. The principle of academic freedom is thus, from the purely economic point of view, a paradoxical one; it asserts that those who buy a certain service may not (in the most important particular) prescribe the nature of the service to be rendered. The reason why such freedom

is nevertheless socially necessary lies in the fact that there are certain professional functions generally recognized to be indispensable in the life of a civilized community which cannot be performed if the specific manner of their performance is dictated by those who pay for them, and that the profession of the scholar and teacher in higher institutions of learning is one of these.

There are three aspects of the social role of the scholar which make such freedom essential. In the first place, he is the technical expert, given a prolonged training and often a costly equipment, and set apart to investigate problems which it is not practicable for all men to investigate thoroughly and at first hand for themselves. His function is thus in part that of expert adviser or informant of the community at large on the questions which fall within his science. Secondly, his office has for the same reason some analogy to that of the judge. His opinions must be not only competent but disinterested. No one indeed is constrained to accept them; but if specialized knowledge and methodical inquiry by trained minds are to have in the long run the part in the shaping of general opinion and social policy which it is desirable that they should have, it is important that those who are appointed to this function should be free from intimidation and subordination. They should, moreover, be beyond reasonable suspicion of subjection to such influences, especially from economic groups. The third reason is the most important. The university is not only a vehicle for transmitting to successive generations knowledge already gained; it is, more distinctively, the chief organized agency for the advancement of science and the canvassing of new ideas. It is the outpost of the intellectual life of a civilized society, the institution set up on the frontier of human knowledge to widen the dominion of man's mind. The performance of this function of seeking new truths will sometimes mean, as it has repeatedly meant since the beginnings of modern science, the undermining of widely or generally accepted beliefs. It is rendered impossible if the work of the investigator is shackled by the requirement that his conclusions shall never seriously deviate either from generally accepted beliefs or from those accepted by the persons, private or official, through whom society provides the means for the maintenance of universities. Others still remain free to adopt or reject, to apply or disregard, new discoveries

or hypotheses, but the university's most characteristic task is to seek for them, cautiously and critically, yet without external restraints.

Academic freedom is, then, a prerequisite condition to the proper prosecution, in an organized and adequately endowed manner, of scientific inquiry and the communication of the results of it to the public and to students in the higher stages of their initiation into the intellectual life of their age. In the needs and rights of such students a further reason for maintaining the teacher's freedom is apparent. They are entitled to learn the contemporary situation in each science, the range and diversity of opinion among specialists in it; it is not the pedagogic province of the university to acquaint students merely with facts of common knowledge and with opinions accepted by the general public or the donors of endowments. The same rights of the student, however, demand of the university teacher, in his function of instruction as distinct from investigation and publication, special care to avoid the exclusive or one-sided presentation of his personal views on questions upon which there is no agreement among experts. He is not entitled to take advantage of his position to impose his beliefs dogmatically upon his students; the nature of his office requires that alternative opinions be fairly expounded, and that the student be encouraged and trained to reach his own conclusions on such questions through critical reflection upon carefully ascertained facts.

It has been held by some writers that in state institutions freedom of teaching conflicts in certain cases with another and more fundamental right—that underlying the principle of the religious neutrality of the state. Upon this principle the opponents of state religious establishments have usually based their case. But it has been argued that "if it is wrong to compel people to support a creed in which they disbelieve, it is also wrong to compel them to support teaching which impugns the creed in which they do believe." And if the teacher in institutions maintained by taxation is free to "teach" the theories he himself accepts, he may, and usually does, impugn the creed of some body of taxpayers, and sometimes of the majority of them. This argument has usually been employed by those who have attempted, in a number of American states, to obtain legislation prohibiting the "teaching of evolution" in state schools and universities—attempts which have been successful in Tennessee (1925), in Missis-

sippi (1927) and (through popular referendum) in Arkansas (1928). The hypothesis of evolution, it is contended, is in conflict with the belief of citizens who accept literally the Biblical narrative of the creation; hence the rights of the taxpayer are violated if instructors paid out of public funds are permitted to teach that hypothesis.

This argument, especially in its application to universities, is subject to two criticisms. First, it involves an ambiguous use of the word "teach." To "teach a theory" might mean merely to expound it; or to expound it and also to state the arguments of its adherents; or to do both of these and also to indicate the prevailing opinion of experts with regard to it; or to let the teacher's own opinion concerning it be known; or to inculcate it dogmatically or to proselytize in behalf of it. If laws prohibiting the "teaching" of certain theories in state institutions are construed only in the last, i.e. in the strictest, sense they do not essentially conflict with the principle of freedom of teaching as above set forth. They would leave entire liberty of inquiry, discussion and undogmatic expression of personal opinion to both teacher and student. The principal objection to them when they are so interpreted is that it is difficult or impossible to define so precisely and comprehensively, in terms of concrete acts, what would constitute violations of them as to bring the matter effectively within the scope of the criminal law.

If, however, prohibition of the "teaching" of any scientific theory not accepted by all taxpayers is construed in any other sense, it is incompatible with the maintenance by the state of institutions performing the characteristic functions of universities. It is evident that the principle of state neutrality cannot consistently be limited to a single hypothesis, but must apply to any "teaching" which any taxpayers believe to conflict with their religious or ethical convictions. A state may, in short, have a university or do without. But it cannot have one, in the usual and proper sense, if it excludes, under a misconception of the principle of neutrality, both a large part of the subject matter of science and also the method of free inquiry and free expression, which is necessary to the functioning of this type of social institution.

There exist in most communities private institutions of learning which do not fully accept the principle of academic freedom, and therefore do not undertake to perform the functions

mentioned. The legitimacy of their existence is generally admitted, but it is evident that a community in which only institutions of this type exist lacks adequate provision for the advancement of science and for the maintenance of that really fruitful "neutrality" in higher education which depends upon liberty of unbiased investigation and thought. Even in institutions of the restricted kind, however, it is commonly recognized that the limitations imposed should be formulated with reasonable definiteness in the charter or statutes, so that teachers may know, before accepting employment, to what requirements they are bound, and that the restrictions upon their liberty of opinion and teaching may not be subject to arbitrary and varying interpretation by administrative officers.

In some cases teachers have been dismissed or otherwise penalized because of their exercise, outside the university, of their ordinary political or personal freedom in a manner or for purposes objectionable to the governing authorities of their institutions. While such administrative action is contrary in spirit to academic freedom, it is primarily a special case of the abuse of the economic relation of employer and employee for the denial of ordinary civil liberties.

There are several principal means, aside from an enlightened public opinion, for the effectual maintenance of academic freedom. It is evident that the governing boards of universities or similar corporations should decline all endowments for the inculcation of opinions specified by the donor. The general control of admission to the teaching office should be in the hands of members of the scholar's profession, and primarily in those of specialists in the subject to be taught. The recommendations, with respect to appointments, of bodies representative of university faculties should not be rejected by state officials or lay governing boards unless there is evidence of corruption, favoritism or the acceptance of discreditable low standards of professional competence in the action of those bodies. But the chief practical requisite for academic freedom consists in guaranteed security of tenure in professorial positions, unless removal for some grave cause (such as proved incompetence or moral delinquency), other than the content of the teaching of the professor concerned, becomes necessary. Experience has shown that such cause may sometimes be officially alleged for dismissals which

are in fact due to pressure from economic, sectarian or other groups desirous of restricting freedom of teaching in some particular. Removal from professorial office should therefore be possible only through some definite form of judicial procedure in which the faculty, as the local representatives of the academic profession, should responsibly participate. The American Association of University Professors, which has contributed much to the formulation of a professional code for university teachers in the United States, has adopted the principle that "every university or college teacher should be entitled, before dismissal or demotion, to have the charges against him stated in writing in specific terms and to have a fair trial on these charges before a special or permanent judicial committee of the faculty senate or council, or by the faculty at large. At such trial the teacher accused should have full opportunity to present evidence" (*General Report on Academic Freedom*, 1915, in *Bulletin* of the Association, vol. i). This rule, however, does not apply to teachers on definitely limited or probationary appointment. But since the withholding of reappointment may also involve a covert or open denial of the teacher's freedom of thought or utterance, the question should, according to the declarations of the same association, always be passed upon by a competent faculty body.

The principle of academic freedom could not influence the policy and organization of universities until its two presuppositions had been formulated and become familiar: first, that science is not static nor even merely cumulative, but is a continual quest of new knowledge, to which old conceptions must be constantly readjusted; and second, that truth is more likely to emerge through the interplay and conflict of ideas resulting from the exercise of individual reason than through the imposition of uniform and standardized opinions by authority. These two ideas in conjunction first became conspicuous in modern thought in the seventeenth century. The new conception of a university as a place devoted to the continuous "advancement of learning" through an organized and cooperative "inquisition of nature" was vigorously enunciated by Bacon ("Prometheus" in *De sapientia veterum*, 1609, and *New Atlantis*, 1627); and both presuppositions found their most eloquent expression in Milton's *Areopagitica* (1644): "If the waters of truth flow not in a continual progression, they sicken into a muddy pool of conformity and tradition"; and "though

all the winds of doctrine were let loose to play upon the earth, so Truth be in the field, we do injuriously by licensing and prohibiting to mis-doubt her strength."

Yet in England these principles remained without actual application to universities for nearly two centuries. It was in Germany that academic freedom had its birth. In 1673 Spinoza was called by the elector palatine, Karl Ludwig, to a professorship in the University of Heidelberg, with the assurance that he would be given *philosophandi libertatem amplissimam*—though upon the understanding that this freedom would not be "abused to disturb the religion publicly established." Spinoza declined the call, partly on the ground that it was not clear how much was implied by the proviso. The principle of freedom of teaching was further extended in the subsequent new foundations in Germany, notably in the universities of Halle (1694), Göttingen (1734) and of Berlin (1809). The principle that "science and the teaching of it are free" became an article of the organic law of Prussia in the constitution of 1850.

The first non-sectarian university in England, the University of London (afterwards London University College), was opened in 1828. Not until 1854-56 were credal requirements for the taking of degrees (other than in divinity) abolished in the older English universities. In 1871 the University Tests Act abolished all theological tests (with the same exception) for the holding of professorships, fellowships, scholarships and other emoluments in these universities and their colleges.

The early American colleges, founded by religious bodies, were subject in varying degrees to sectarian restrictions. These limitations, in force until the nineteenth century, were eventually abolished in all the more important of the older institutions. The earliest state university, established in Virginia in 1819 upon the plans of Jefferson, was non-sectarian, but there was no express enunciation of the principle of academic freedom in the act creating it; and the first appointee to its faculty, Thomas Cooper, though chosen by Jefferson himself, was removed under pressure from certain religious leaders. In later times interference with freedom of teaching in the United States has usually taken the same form: it has consisted in attempts by sectarian, political, economic or other groups to impose limitations not prescribed by statute or by the charters of the institutions concerned, usually through the dis-

missal of teachers whose opinions or utterances were obnoxious to these groups.

The above mentioned formulation by American university teachers of a code for the preservation of academic freedom indicates not only a growing professional cohesiveness but an increasing general awareness of the problem. Overt attempts at the control of teaching have probably become less frequent and, when made, less effective in recent years. The great and expanding cost of maintenance of a modern university has made private institutions—which are especially numerous and important in America—dependent upon a steady flow of large gifts from persons of wealth; and this situation, it has often been asserted, causes the teaching of the social sciences in such institutions to reflect unduly the interests and views of a single class. This interpretation has been expressed most forcibly by Thorstein Veblen. The greater gifts to American higher education have, however, usually been notably exempt from formal restrictions upon freedom of teaching; and in a number of privately endowed universities it has been better assured than in many state institutions. While ambitious administrative officers chiefly concerned for future endowments have not seldom imposed upon teachers in these subjects an unwholesome and unbecoming timidity and subservience, there are some indications that this condition is becoming more rare. Although exception must be made of certain sections of the country, it is probable that in the greater part of the United States, at the close of the third decade of the twentieth century, freedom of thought and speech in universities is growing wider and less insecure. The price of liberty is, however, the same in universities as elsewhere.

ARTHUR O. LOVEJOY

See: FREEDOM OF SPEECH AND OF THE PRESS; RELIGIOUS FREEDOM; UNIVERSITIES AND COLLEGES; RESEARCH; ENDOWMENTS AND FOUNDATIONS; TEACHING PROFESSION; LEARNED SOCIETIES; PROFESSIONAL ETHICS; EXPERT; SCIENCE; RELIGIOUS EDUCATION; SECTS; FUNDAMENTALISM; INTOLERANCE; CONFORMITY; PUBLIC OPINION. See also Part II of the Introduction to volume I, on the Social Sciences as Disciplines.

Consult: UNITED STATES: American Association of University Professors, *Bulletin*, vol. i (1915) 17-43, vol. iv (1918) no. 2, vol. vii (1921) no. 1, p. 8-9, vol. viii (1922) 100-02, 489-549; *Academic Freedom*, compiled by Julia E. Johnsen, Reference Shelf, vol. iii, no. 6 (New York 1925); Chafee, Z., *Freedom of Speech* (New York 1920) ch. vii; Jameson, J. F., *Control of Higher Education in the United States* (Richmond, Ind. 1910); Cattell, J. McK., and others,

University Control (New York 1913); Veblen, T. B., *The Higher Learning in America* (New York 1918); Meiklejohn, Alexander, *Freedom and the College* (New York 1923); Shipley, M., *The War on Modern Science* (New York 1927); Lippmann, W., *American Inquisitors* (New York 1928).

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ACADEMIES. See LEARNED SOCIETIES.

ACCEPTANCE. The acceptance of a bill of exchange is defined in the Uniform Negotiable Instruments Law as "the signification by the drawee of his assent to the order of the drawer." It is the drawee's adoption of the bill or draft as his obligation, without which the instrument is no contract of his. The acceptance must be in writing and must be signed by the drawee. Acceptance is appropriate or necessary only in the case of time bills, as contrasted with demand or sight bills; but the certification of checks should be noted as an exception to this statement. The word "acceptance" is also used to signify the accepted bill itself.

A time bill drawn by the seller of goods upon the buyer thereof and accepted by the latter is known as a "trade acceptance." This is an important instrument of foreign and of domestic commerce, and in this country today such bills are being drawn and discounted even where seller and buyer are in the same city.

The time bill drawn upon and accepted by a bank gives us what is known as a "bank acceptance." Bills drawn upon and accepted by "acceptance houses" and "acceptance corporations" are for most purposes classified with bank acceptances. There is now at all times a tremendous volume of bank acceptances outstanding in this country. They are created to finance the movement or sale of goods in both our foreign and our domestic trade and are

utilized to some extent to finance for short periods the carrying of goods in warehouses.

The right of any person or company to draw a time bill upon a given bank is in no way founded upon the possession of a deposit with that bank, but is created by a special arrangement which pertains to some particular mercantile or financial transaction or to a series of such transactions. The authority which the bank confers upon the accommodated party to draw the time bill is very commonly evidenced by a letter, which usually takes the form of the so-called commercial letter of credit. It is understood that the accommodated party or parties will before the maturity of the acceptance supply the bank with the funds necessary to discharge the instrument, and that they will pay the bank a commission. The normal arrangement will provide in one manner or another for the pledge of the goods involved in the case to the bank as collateral security during the time running between the acceptance of the draft and the bank's receipt of funds for payment thereof, that is, the time through which it carries a risk. The bank does not lend any funds of its own and it does not receive any interest on money. What the bank does is to lend the strength of its name and take a risk of the failure of the accommodated parties to provide funds for the discharge of the acceptance at maturity, and it receives a commission which is chiefly a reward for this risk taking. The drawer of the bill obtains cash for the same by discounting it with some bank or broker. American banks often discount and rediscount their own acceptances.

Before the establishment of the Federal Reserve Banks the time bill was very little used in the domestic commerce of the United States. When a negotiable instrument did arise out of a mercantile transaction it would be the buyer's promissory note made payable to the one who had sold him goods on time. But since 1913 and especially since the conclusion of the Great War there has been an immense development in the use of time bills (and thus of course of acceptances). This movement was stimulated by the strong and persistent advocacy of the use of the instrument by a group of bankers and business men organized under the name of the "American Acceptance Council." The Federal Reserve Act affected this development (1) by making clear the legal right of national banking corporations to serve as drawees and acceptors of time bills (a right called in question by the decision of a lower federal court at an earlier time) and

(2) by giving the accepted bill of exchange a favored position over the promissory note, among instruments eligible for purchase by the Federal Reserve Banks. This country now affords a large and stable discount market for acceptances, and it is evident that this market will be permanent. The acceptance business of banks and of acceptance houses is older in Europe than in the United States and has flourished especially in England.

A. C. WHITAKER

See: BILL OF EXCHANGE; NEGOTIABLE INSTRUMENTS; BANKING, COMMERCIAL; FEDERAL RESERVE SYSTEM; FOREIGN EXCHANGE; MONEY MARKET.

Consult: Mathewson, P., *Acceptances, Trade and Bankers'* (New York 1921); Steiner, W. H., *The Mechanism of Commercial Credit* (New York 1922); Ward, W., *American Commercial Credits* (New York 1922); Burgess, W. R., *The Reserve Banks and the Money Market* (New York 1927); *Acceptance Bulletin* (monthly) of the American Acceptance Council, published since 1919; *Federal Reserve Bulletin* (monthly) of the Federal Reserve Board, published since 1915 (for statistics and valuable discussion).

ACCIDENT INSURANCE. *See* COMPENSATION AND LIABILITY INSURANCE.

ACCIDENTS of all sorts took about 96,000 lives in continental United States in 1928, according to the estimates of the National Safety Council. Accidents in that year ranked seventh among all the causes of death, following close after pneumonia and tuberculosis. The accident death rate was in 1927 over two and one half times as great among males (112.3 per 100,000) as among females (43.6 per 100,000). In contrast to the principal diseases whose incidence is much heavier in later life, the accident death rate varies relatively little for the various age groups. Thus among children from five to fourteen accidents as a cause of death surpass not only any one disease but any two diseases. In the five to nine age group automobile accidents alone caused more deaths in 1926 than any one disease.

The trend of the accident death rate during the present century and especially during the past fifteen years has been on the whole slightly downward, but the decline has not been nearly so rapid as in the case of such diseases as typhoid fever, smallpox and tuberculosis. While the death rate from a considerable group of these diseases declined over 50 percent between 1913 and 1927, the accident death rate during the same period showed a net decline of only 7.4 percent.

This decline has been accomplished in the face of a rapid and serious increase in automobile accidents. Table I gives the comparison of death rates in 1911 and 1927, from Census Bureau figures, for the more important types of accidents. Each item shows a decrease, sometimes as great as 50 percent, with the exception of automobile accidents, which were multiplied almost ninefold. This multiplication has been due of course to the great increase in automobile traffic.

Vital statistics offer no separation between industrial and non-industrial or "public" accidents. The sub-classification afforded by the International List of Causes of Death relates rather to the type of accident, as shown in Table I. From other data it has been estimated by the National Safety Council that of the total of 96,000 deaths in 1928 one fourth, or about 24,000, occurred in industry, leaving about 72,000 to be classed broadly as "public," including some 24,000 in the home, 27,500 in automobile accidents and the remainder from miscellaneous causes in public places, such as drowning, fire, falls and the like.

The number of accidents causing non-fatal personal injuries can only be roughly estimated by applying the ratios which have been found to exist in certain localities or groups. Table II sets forth the estimated non-fatal injuries, as well as fatalities in the public, home and industrial groups, together with similar estimates of the direct economic cost.

As the classification of accidental deaths based on the International List of Causes of Death is so unsatisfactory from the point of view of prevention, various efforts are now being made to improve the statistical knowledge of accidents. The standard death certificate is being altered to show in all cases of accidental death whether the accident occurred at home, in industry or in a public place, and to show also something of its nature. In addition an increasing number of state and city vital statisticians are using a supplementary form to obtain still further needed information regarding the circumstances of accidental deaths. Detailed information for non-fatal as well as fatal accidents is being collected by certain state motor vehicle bureaus, city police departments and safety councils, as well as by labor departments and individual industries.

The accident problem, although serious, is now no more so and probably less so than in earlier decades or centuries. Our machine age

TABLE I

ESTIMATED ACCIDENTAL DEATHS IN THE UNITED STATES, AND DEATH RATES 1927 COMPARED WITH 1911

TYPE OF ACCIDENT	NUMBER OF FATALITIES 1927*	DEATH RATES PER 100,000 U. S. REG. AREA		
		1927	1911	PERCENT CHANGE
Accidental and unspecified external causes	93,127	78.4	84.7	-7.4
Burns (conflagration excepted)	6,669	5.6	7.7	-27.3
Accidental drowning	7,991	6.7	9.4	-28.7
" shooting	3,060	2.5	2.2	+13.6
" falls	16,596	14.0	15.0	-6.7
Mine accidents	2,940	2.5	3.8	-34.2
Machinery accidents	2,326	2.0	2.1	-4.8
Railroad accidents	7,549	6.4	13.0	-50.8
Collision with automobiles	1,836	1.5	..	..
Other railroad accidents	5,713	4.8	..	..
Street car accidents	1,590	1.3	3.2	-59.4
Collision with automobiles	521	0.4	..	..
Other street car accidents	1,069	0.9	..	..
Automobile accidents (excluding collision with railroad and street cars)	23,176	19.5	2.2	+786.4
Injuries by vehicles (other than railroad cars, street cars and automobiles)	1,750	1.5	3.8	-60.5
Excessive heat (burns excepted)	580	0.5	5.3	-90.5
Other external causes	18,900	15.9	17.0	-6.5

*Estimated for entire United States from U. S. Census Bureau data.

has introduced new hazards, but it has probably eliminated more than it has produced. Yet accidents and their prevention, both in and out of industry, are undoubtedly receiving much greater attention today than ever before. The reasons are both altruistic and economic. This change in our national attitude toward accidents is quite in keeping with other trends of thought and action.

On the non-economic side the greater interest in the tragedies of accidental death or injury follows naturally upon the greater appreciation of the value of human life. Our increasing determination, as individuals and as a people, to reduce accidents is thus in step with our like determination to reduce diseases, prolong the span of life and generally ameliorate mortal ills rather than blindly accept them.

But in this industrial age the economic cost of accidents and the economic necessity of accident prevention are perhaps even more weighty. Not in industry alone are accidents now recognized as a definite and serious economic loss. An accident, wherever it occurs, represents an interruption of the orderly business of society. Death or disablement of the home keeper is just as much an economic loss to the family

and to society as death or disablement of the factory worker. Careful calculations have demonstrated the large economic investment in children of various ages as well as in adults, all of which is lost to society in the event of untimely death through accident. The medical and hospital costs of an accident are often heavy. And generally there are related costs such as property damage, loss of time by associates and other losses growing out of the interruption. In fact for every accident causing death or personal injury there are several which cause a measurable economic loss without personal injury. Rarely are these costs met by any sort of compensation or insurance (and

TABLE II

ESTIMATED ACCIDENTS AND THEIR COST, UNITED STATES, 1928, BY LOCATION*

TYPE OF ACCIDENT	FATAL	NON-FATAL PERSONAL INJURIES	ECONOMIC LOSS†
Motor vehicle	27,500	950,000	\$900,000,000
Other public	20,500	2,000,000	
Home	24,000	4,800,000	
Industrial	24,000	3,200,000	1,000,000,000

*Estimated for entire United States from reports made to the National Safety Council.

†Economic loss from fire is estimated at \$550,000,000 additional.

when so, the cost is only passed on or distributed). Generally the expense must be absorbed by the individual or family budget, often entailing the most serious sacrifices. In other cases the financial and mental strain of a serious accident pushes the family over the line into temporary or permanent dependence, and society must pay the bill. In some cities careful studies have indicated that accidents cause as high as 17 percent of the total community cost for social service and relief.

Accident prevention is more possible in a controlled world. We have to a large extent learned how to avoid losses of life and injuries from the forces of nature. While these gains have been partly offset through the development of man made hazards, such as the automobile, it is possible to control these also—witness the decline in railroad accidents as shown in Table 1. And if accident prevention is more possible in a controlled world, it is equally true that in such a world the high cost of accidents and the need for accident prevention are more apparent and more keenly recognized.

The remedies for accidents of any sort fall into two main divisions: first, improvement of the environment, or removal of physical hazards; and second, improvement of personal practises, which is to be sought through a combination of education and supervision. Thus the prevention of traffic accidents means better streets and highways, better vehicles, better traffic control systems; education of all street users to understand the hazards of the street and to avoid them through care and law observance; and, finally, proper law enforcement for the recalcitrant minority. In exactly the same way the avoidance of home accidents means keeping home equipment in safe condition, educating both children and adults to the proper use of home equipment and the avoidance of unsafe practises and, finally, supervision of children especially to make sure that these precepts are carried out. And both these cases are parallel to the necessary combination of engineering improvement, education and supervision in industry. It is through such measures that accidents have been reduced and almost eliminated in numerous cases, and it is through similar measures that the present toll must be cut down.

SIDNEY J. WILLIAMS

See: ACCIDENTS, INDUSTRIAL; MINING ACCIDENTS; RAILROAD ACCIDENTS; MOTOR VEHICLE ACCIDENTS;

MORTALITY; SAFETY MOVEMENT; COMPENSATION AND LIABILITY INSURANCE.

Consult: National Safety Council, *Accident Facts 1929* (statistical report) (Chicago 1929); National Safety Council, *Proceedings*, published annually since 1912.

ACCIDENTS, INDUSTRIAL. The subject of industrial accidents covers the occurrence of unforeseen or unexpected happenings in industry causing death or injury to persons employed or occupied, together with their causes and prevention. The present article is limited primarily to manufacturing industries; for other types of industrial accidents see MINING ACCIDENTS, RAILROAD ACCIDENTS and MOTOR VEHICLE ACCIDENTS.

The importance of industrial accidents may be illustrated by estimates of their numbers and of the economic losses which they produce. In the United States in 1919, it was estimated, there were 23,000 fatal accidents in industry, 115,000 accidents causing permanent total or partial disability, and 3,000,000 accidents causing disability of one day or more. These figures, together with the standard equivalents in time loss (see Table 1) in cases of death and total disability, were used as the basis for an estimate of 296,000,000 days of lost time due to industrial accidents.

The wage loss was estimated, on the basis of an average of \$4.00 per calendar day, at a total of \$1,184,000,000. If the cost of subsistence of the men killed be deducted, and the costs of medical service and insurance overhead, amounting to an estimated \$161,000,000, be added, the net economic loss due to industrial accidents reaches the figure of \$1,014,000,000. In this sum no allowance is made for discounting. Actually the accidents that occur in a given year cause losses which in cases, for example, of permanent total disability run far into the future. If in figuring the total losses from accidents which occur in a given year an allowance is made for discounting the value of these future losses to the date of the accident in all cases, the net total loss is reduced by about one third, or roughly to \$675,000,000. This represents approximately the annual losses from accidents in the United States.

The hazard of industry, or the frequency of accidents to persons employed or occupied in industry, is a concept capable of statistical measurement. In many industries, such as coal mining in gaseous mines, airplane transportation and deep sea fisheries, the presence of risk can

be recognized without elaborate statistics. Publicity given to accidents in these industries forms the basis for a popular estimate of risk. But a true picture of hazard can be given only by statistics of accidents placed in relation to the number of persons exposed to risk. The gathering of data on these points is comparatively recent; it is only within the past half century that it has been done, usually in connection with the administration of workmen's compensation laws for alleviating the consequences of industrial accidents.

Injury or death to the person, rather than the "accident," is the primary unit for measuring industrial hazard. Thus mass accidents or catastrophes in which many persons lose their lives or suffer serious injury are counted in the statistics not as a single accident but as injuries or fatalities to the number of persons involved. An "accident" in which no one is injured or killed is not counted in statistics of industrial accidents, although separate data on such accidents are available for railroad operation. Such occurrences may involve considerable property damage, but their omission from the statistics of injuries is necessary in order not to confuse the significance of industrial hazard. The data obtained as statistics of injuries, their causes and prevention are doubtless equally valid for all accidents.

Injuries caused by accidents are of different degrees of severity, ranging from the slightest abrasion of the skin to total disability or death. The number of trivial injuries, as already indicated by the estimates quoted, is of course far greater than the number of serious injuries. In the statistics, accordingly, minor accidents are omitted. In the larger number of states of the United States the recommendation of the International Association of Industrial Accident Boards and Commissions is followed, according to which injuries are tabulated if they caused lost time extending beyond the day or shift during which the accident occurred. In some states only accidents causing loss of time of a week, or even two weeks, are counted. In others accidents are tabulated only if compensable, that is, only if the loss of time exceeds the minimum waiting period, which may vary from three days to two weeks or more. These differences in definition of accidents which figure in the statistics are a cause of serious difficulty in statistical comparisons of industrial hazards in different states or countries.

The simplest method of stating industrial

hazard is to measure frequency of accidents in relation to the average number of employees exposed to the risk of accident. As already noted, minor injuries causing no lost time beyond the day of the accident are omitted. Even when these are omitted, however, the great number of relatively insignificant injuries means that such a rate is largely controlled by their frequency. This difficulty can be avoided in two ways.

In the first place, special rates can be framed on the basis of particular classes of disability: a frequency rate for fatal accidents; another for permanent total disability; a third for permanent partial disability; and a fourth for temporary disability. In this way the total accident frequency rate is split up into various components, each fairly comparable with other similar rates, except the fourth, which depends upon the definition of minor accidents included

TABLE I
SCALE OF TIME LOSSES FOR WEIGHTING INDUSTRIAL
ACCIDENT DISABILITIES

NATURE OF INJURY	DAYS LOST	DEGREE OF DISABILITY IN PERCENT OF PERMA- NENT TOTAL DISABILITY
Death	6,000	100
Permanent total disability	6,000	100
Arm above elbow, dismemberment	4,500	75
Arm at or below elbow, dismemberment	3,600	60
Hand, dismemberment	3,000	50
Thumb, any permanent disability	600	10
Any one finger, any permanent disability	300	5
Two fingers, any permanent disability	750	12½
Three fingers, any permanent disability	1,200	20
Four fingers, any permanent disability	1,800	30
Thumb and 1 finger, any permanent disability	1,200	20
Thumb and 2 fingers, any permanent disability	1,500	25
Thumb and 3 fingers, any permanent disability	2,000	33½
Thumb and 4 fingers, any permanent disability	2,400	40
Leg above knee, dismemberment	4,500	75
Leg at or below knee, dismemberment	3,000	50
Foot, dismemberment	2,400	40
Great toe, or any 2 or more toes, any permanent disability	300	5
One toe, other than great toe, any permanent disability	0	0
One eye, loss of sight	1,800	30
Both eyes, loss of sight	6,000	100
One ear, loss of hearing	600	10
Both ears, loss of hearing	3,000	50

in the statistics. In comparisons between countries these rates are often more useful than the total frequency rates.

Secondly, a composite rate may be formed by weighting the accidents in accordance with their severity. The most feasible (and most used) method is to weight accidents in proportion to the actual time lost; except that in case of death, permanent total disability and specific types of dismemberment accidents are weighted according to a standard weighting system which places a due weight upon these serious injuries. Table I gives the standard weights adopted by the International Association of Industrial Accident Boards and Commissions, which are used by the United States Bureau of Labor Statistics in its accident severity rates. In this system a death or total disability is weighted with 6000 days lost time, on the assumption that the average loss in such cases is equivalent to twenty years of three hundred working days each, while the weight assigned for the loss of a hand is set, perhaps somewhat arbitrarily, at 3000 days. Severity rates, as thus calculated, measure industrial hazard in terms of days lost as compared with the time at risk.

In all these rates the basis or "exposure" is of fundamental importance. The total number of workers is less satisfactory than the average number of workers employed, since the latter gives a truer measure of exposure; and furthermore, because of differences in hours of labor in different industries and at different times, even the average number of employees is a relatively poor method of measuring exposure. Obviously the longer the working hours, other things being equal, the greater the number of accidents. In order, then, to allow for differences in hours of work between different establishments or different industries, and particularly in order to measure gains in reduced accident frequency due to decreases in hours of labor, the denominator of the rate fraction must take account of the total hours of employment. Accordingly, in careful accident statistics, frequency and severity rates are expressed in terms of hours of employment, e.g. in terms of 1,000,000 or 1000 hours (as in the rates of the United States Bureau of Labor Statistics) or in terms of the number of "full time workers," that is, a worker working 300 days a year, 10 hours a day, or 3000 hours (as in German accident rates).

Turning to the statistics of accidents in industry, Table II presents, for eleven states,

accident frequency and severity rates by industries for the year 1925. Frequency rates (accidents per 1,000,000 hours exposure) varied from 1.96 in the manufacture of woolen goods to 59.08 in the manufacture of automobile tires. Severity rates (days lost per 1000 hours exposure) ranged from .32 in the boot and shoe industry to 4.85 in the paper and pulp industry. Among the more hazardous manufacturing industries were structural iron work, lumber planing mills, lumber saw mills and flour mills. Among the least hazardous were the manufacture of woolen goods and the manufacture of stamped and enamel ware. The rates for a single year, however, are not always significant of permanent conditions, since they may be affected or determined largely by unusual conditions.

The most extensive analysis of hazard in any American industry is that of the iron and steel industry made by the United States Bureau of Labor Statistics. This analysis extends over a period of twenty years. The hazards of the industry are analyzed according to the department of work and, to a limited extent, according to occupation, age and other personal characteristics. Subjoined is a table showing variations in accident frequency and severity rates in the iron and steel industry from 1907 to 1925.

The analysis shows striking differences between different departments in the iron and steel industry. Frequency rates per million hours exposure for 1921-1924 varied from 17.0 in Bessemer converters to 63.1 in foundries, while severity rates for the same period ranged from 1.9 days lost per thousand hours of exposure in sheet mills to 4.6 in blast furnaces.

The record of improvement in accident frequency and severity is brought out clearly in this table. In the department of Bessemer converters the frequency fell from 101.5 in 1907-1910 to 17.0 in 1921-1924, a decrease of over 80 percent. In foundries, however, little or no change has been manifest. In heavy rolling mills a decline of 70 percent has been attained. In sheet mills a decrease of over 25 percent has been noted. Decreases in severity rates are somewhat less marked. This is especially true of Bessemer converters, where the decrease in severity rates was only slightly over 50 percent as compared with an 83 percent decrease in the frequency rate.

Comparisons between the two parts of the steel industry are significant of the influence of preventive work. The average accident fre-

TABLE II
ACCIDENT FREQUENCY AND SEVERITY RATES BY INDUSTRIES FOR 11 STATES, 1925 *

INDUSTRY	ACCIDENT FREQUENCY RATES PER 1,000,000 HOURS EXPOSURE				ACCIDENT SEVERITY RATES PER 1000 HOURS EXPOSURE			
	DEATH	PER- MA- NENT DISA- BILITY	TEM- PO- RARY DISA- BILITY	TOTAL	DEATH	PER- MA- NENT DISA- BILITY	TEM- PO- RARY DISA- BILITY	TOTAL
Agricultural implements	0.18	1.60	23.31	25.09	1.10	1.26	0.42	2.78
Automobiles	.10	1.24	7.80	9.14	.59	1.02	.16	1.77
Automobile tires	.07	1.03	57.98	59.08	.40	1.06	.84	2.30
Boots and shoes	....	.18	9.88	10.06	....	.13	.19	.32
Brick	.17	.62	30.46	31.25	1.03	.73	.55	2.31
Carpets	.15	1.00	4.87	6.02	.91	1.45	.15	2.51
Chemicals	.09	1.00	5.63	6.72	.52	1.49	.18	2.19
Electrical machinery	.07	1.26	9.46	10.79	.43	1.12	.24	1.79
Flour	.37	.65	18.71	19.73	2.21	.57	.27	3.05
Foundry and machine shops	.08	1.43	23.62	25.13	.48	1.24	.43	2.15
Furniture	....	1.09	14.96	16.05	....	.79	.25	1.04
Glass	.03	.49	24.37	24.89	.16	.65	.27	1.08
Leather	.07	1.08	11.17	12.32	.43	.82	.29	1.54
Lumber—planing mills	.20	1.96	19.78	21.94	1.22	2.62	.49	4.33
Lumber—sawmills	.36	.78	18.49	19.63	2.15	.66	.48	3.29
Machine tools	.06	.94	21.09	22.09	.33	.77	.27	1.37
Paper and pulp	.15	2.39	20.47	23.01	.90	3.20	.75	4.85
Pottery	.11	.32	16.52	16.95	.64	.87	.37	1.88
Slaughtering and meat packing	.21	1.13	22.94	24.28	1.26	.94	.42	2.62
Stamped and enameled ware	....	.68	16.97	17.65	....	.54	.19	.73
Steam fittings, apparatus and supplies	.05	2.04	31.52	33.61	.32	1.89	.74	2.95
Stoves	.08	.25	43.08	43.41	.50	.24	.45	1.19
Structural-iron work	.31	2.15	48.49	50.95	1.84	1.95	.75	4.54
Woolen goods	.03	.34	1.59	1.96	.16	.24	.05	.45

* Source: U. S. Bureau of Labor Statistics, *Bulletin no. 439*, "Handbook of Labor Statistics, 1924-26" (Washington 1927) p. 226.

TABLE III
ACCIDENT RATES IN THE IRON AND STEEL INDUSTRY BY DEPARTMENTS AND BY FOUR-YEAR PERIODS *

PERIOD	ALL DEPART- MENTS	BLAST FUR- NACES	BESSEMER CONVERT- ERS	OPEN HEARTH	FOUND- RIES	HEAVY ROLLING MILLS	PLATE MILLS	SHEET MILLS
FREQUENCY RATES (PER 1,000,000 HOURS EXPOSURE)								
1907-1910	69.2	76.1	101.5	84.2	60.1	61.0	69.4	44.1
1911-1914	53.3	50.3	65.0	67.6	59.3	39.4	44.7	48.1
1915-1918	41.6	39.0	57.7	50.5	61.0	32.4	39.2	32.7
1919-1922	34.9	32.9	30.5	33.0	61.7	23.8	31.4	37.2
1921-1924	31.3	29.0	17.0	29.9	63.1	18.1	26.8	32.2
SEVERITY RATES (PER 1000 HOURS EXPOSURE)								
1907-1910	5.0	10.6	7.6	7.5	2.7	4.4	5.1	3.1
1911-1914	3.6	6.2	5.3	5.8	3.3	3.4	3.1	2.2
1915-1918	3.6	5.8	6.9	6.5	3.4	3.9	2.5	1.5
1919-1922	3.0	5.0	3.2	4.2	2.7	2.4	2.4	1.9
1921-1924	2.7	4.6	3.2	4.0	3.1	2.6	2.6	1.9

* Source: Compiled from U. S. Bureau of Labor Statistics, *Bulletin no. 439*, "Handbook of Labor Statistics, 1924-26" (Washington 1927) p. 235.

quency and severity rates in that part of the industry which is engaged in active safety work are approximately one fourth those in the other part. How striking was the decrease in accident frequency rates in the former division can be learned from Table IV. An average frequency rate of 60.3 accidents per million hours exposure for the year 1913, for example, decreased for the year 1925 to 8.2, a decrease of over 85 percent. An analysis of the rate by causes permits us to judge how evenly the decline was distributed among the component parts of the rate.

TABLE IV

ACCIDENT FREQUENCY RATES (PER 1,000,000 HOURS EXPOSURE) BY CAUSES IN A PORTION OF THE STEEL INDUSTRY, 1913, 1925 AND 1913-1925 *

CAUSE OF ACCIDENT	1913	1925	AV- ER- AGE, 1913- 1925
All causes	60.3	8.2	27.2
Machinery	7.3	1.6	3.7
Working machines	3.8	.7	1.7
Caught in	2.5	.5	1.2
Breakage	.1	—†	.1
Moving material in	1.2	.2	.4
Cranes, etc.	3.5	.9	2.0
Overhead	2.8	.7	1.6
Locomotive	.3	.1	.2
Other hoisting apparatus	.4	.1	.2
Vehicles	2.3	.3	1.1
Hot substances	5.4	.6	2.6
Electricity	.5	—†	.2
Hot metal	3.6	.4	1.8
Hot water, etc.	1.3	.1	.6
Falls of persons	4.5	1.1	2.6
From ladders	.3	—†	.1
From scaffolds	.2	.1	.2
Into openings	.2	—†	.1
Due to insecure footing	3.8	.9	2.2
Falling material, not otherwise specified	1.2	.1	.4
Handling	26.7	3.4	12.5
Dropped in handling	11.2	1.5	5.1
Caught between	3.4	.4	1.6
Trucks	1.9	.2	.8
Lifting	2.5	.3	1.4
Flying from tools	.2	—†	.1
Sharp points and edges	3.8	.4	1.8
Tools	3.7	.5	1.6
Miscellaneous	12.9	1.1	4.3
Asphyxiating gas	.3	.1	.1
Flying, not striking eye	.8	.1	.4
Flying, striking eye	2.9	.2	1.2
Heat	.9	—†	.2
Other	8.0	.8	2.4

* Source: Compiled from table, U. S. Bureau of Labor Statistics, *Bulletin no. 439*, "Handbook of Labor Statistics, 1924-26" (Washington 1927) p. 235-36.
† Less than one tenth of one.

Accident frequency and severity rates are available in detail for a few industries outside the iron and steel industry. The United States Bureau of Mines compiles accident frequency rates in metallurgical plants. In 1924 frequency rates per 1000 hours exposure were 52.42 for ore dressing plants, 37.73 for smelting plants and 46.17 for auxiliary works. For fatal injuries the frequency rates were .41, .18 and .36 respectively.

For certain establishments associated in the National Safety Council accident experience by industries is available. Frequency and severity rates in thirteen principal industries in 1925, based upon conditions in 1231 establishments represented in the National Safety Council, are given in Table V. The average accident frequency rate for all these establishments was 30.60 (per 1,000,000 hours) and the average severity rate was 2.02 days lost per 1000 hours worked. The lowest rates were in the textile industry, with a frequency rate of 13.61 and a severity rate of .45. In this industry only one accidental death occurred in 77,924,601 hours of employment. The highest rate (except that of 99.99 in mining) was 69.54 in construction (with a severity rate of 7.57). Since the establishments included in this experience are all actively interested in safety work, it is probable that these rates are lower than the average for the industries as a whole.

Next to the study of industrial accidents in the United States, that in Germany is of

TABLE V

INDUSTRIAL ACCIDENT EXPERIENCE BY INDUSTRIES, 1925, FOR ESTABLISHMENTS ASSOCIATED IN THE NATIONAL SAFETY COUNCIL *

INDUSTRY	FREQUENCY RATES (PER 1,000,000 HOURS EXPOSURE)	SEVERITY RATES (PER 1000 HOURS EXPOSURE)
Total	30.60	2.02
Automotive	23.42	1.06
Cement	26.08	5.00
Chemical	20.91	2.71
Construction	69.54	7.57
Metals	32.50	1.82
Mining	99.99	8.51
Packers and tanners	40.15	1.27
Paper and pulp	38.43	2.15
Petroleum	27.35	2.33
Quarry	48.56	7.64
Rubber	29.15	1.11
Textile	13.61	.45
Woodworking	44.20	2.75

* Source: U. S. Bureau of Labor Statistics, *Bulletin no. 439*, "Handbook of Labor Statistics, 1924-26" (Washington 1927) p. 253.

especial interest. In Germany, as early as 1884, an accident insurance or workmen's compensation law on a comprehensive scale was passed. In preparing the statistical basis for the law it was recognized that statistics of accidents were far from satisfactory. A by-product of the law

TABLE VI

ACCIDENT FREQUENCY RATES IN SELECTED INDUSTRIES, GERMANY, 1926 *

INDUSTRY	ACCIDENTS PER 1000 FULL TIME WORKERS			
	TOTAL	FATAL	TOTAL DISABILITY	PARTIAL DISABILITY
All industries	6.87	0.56	0.06	6.26
Mining	13.85	1.96	0.05	11.84
Quarrying	12.68	1.36	.20	11.12
Iron and steel:				
South German	10.05	.45	.04	9.55
Middle German	4.94	.27		4.66
Northeast German	7.47	.44	.06	6.97
Silesian	15.46	.56	.05	14.85
Northwest German	7.46	.58	.01	6.87
Other metals:				
South German	6.12	.10	.03	6.00
Musical instruments	4.63	.09	—	4.54
Glass	4.49	.27	—	4.23
Chemical	6.09	.48	.06	5.55
Gas and water works	5.99	.66	.04	5.29
Linen	4.61	.22	.02	4.37
Textile:				
North German	2.64	.10	.02	2.51
Silk	2.02	.10	.02	1.90
Paper	3.82	.06	.01	3.74
Papier maché	10.37	.91	.03	9.43
Leather	6.72	.41	.06	6.25
Wood:				
North German	7.63	.29	—	7.33
Milling	11.37	.87	.14	10.36
Sugar	2.25	.10	.02	2.13
Brewery and malt products	4.97	.39	—	4.57
Tobacco	1.04	.02	—	1.01
Clothing	2.44	.06	—	2.38
Construction:				
Hamburg	8.52	.64	.08	7.80
Book printers	2.52	.11	.01	2.39
Inland navigation	7.53	.72	.05	6.76
Ocean navigation	7.48	1.69	.12	5.67
Slaughtering and meat packing	7.13	.31	.28	6.54
Wholesale trade	7.65	.65	.14	6.86
Retail trade	1.78	.08	.03	1.67
ACCIDENTS PER 1000 INSURED WORKERS				
All industries	6.04	.49	.05	5.50
Agriculture	4.27	.19	.09	3.98

* Source: Compiled from *Statistik der Sozialversicherung 1926, mit einem Blick auf das Jahr 1927*, Beilage zu den amtlichen Nachrichten für Reichsversicherung (1928) no. 2, p. 24-25.

has been the development of reasonably accurate accident frequency rates.

Table VI shows accident frequency rates per 1000 full time workers in a number of German industries. These rates are not statistically comparable with those already presented for the United States, since in Germany accidents causing less than thirteen weeks disability are cared for by the sickness insurance institutions, while only those causing disability exceeding this period are counted in the statistics of cases cared for by the accident insurance funds. In any case the differences in the basis of calculation in terms of (per 1000) full time workers

TABLE VII

COMPARATIVE MORTALITY FROM ACCIDENT FOR SELECTED OCCUPATIONS, ENGLAND AND WALES, 1910-1912 *

OCCUPATION	COMPARATIVE ACCIDENT MORTALITY FIGURE †
All occupied and retired males	47
Seamen-merchant service	199
Bargemen, lightermen, watermen	193
Coal miners	118
Dock laborers, wharf laborers	100
Fishermen	97
Lead miners	96
Tin miners	95
Iron miners and quarriers	93
Stone slate quarriers	89
Railway guards, porters, pointsmen	78
Coal heavers	77
Ship building	64
Coach, cab, omnibus service, grooms	49
Railway engine drivers, stokers, cleaners	47
Boiler makers	41
Copper manufacture, copper workers, coppersmiths	41
Glass manufacturing	38
Paper manufacturing	31
Brewers	30
Sawyers	30
Cotton manufacturing	29
Farmers, graziers, farmers' servants	28
Law clerks	22
Civil service, officers and clerks	22
Printers	21
India rubber, gutta percha workers, etc.	18
Wool worsted manufacturing	16
Silk manufacturing	13
Clergymen and priests	13
Hosiery manufacturing	12

* Source: *Supplement to the 75th Annual Report of the Registrar-General for England and Wales*, part iv, "Mortality of Men in Certain Occupations in the Three Years, 1910, 1911, and 1912" (London 1919) p. xxii-xxiv.

† Calculated by applying to a standard male population 25 to 65 years of age the actual accident mortality rates in the specified occupation, the average rate from accident for all occupied and retired males 25-65 yielding 47 deaths when applied to this standard population. See reference for details of its construction.

(i.e. per 3,000,000 hours) should be noted. The chief value of these figures is for comparing different industries, and for this purpose rates for mining, transportation and agriculture are included in the table. Frequency rates are shown also for fatal cases, for total disability and for partial disability.

The statistical record of accidents in Germany shows a very marked decrease in accident frequency rates in the forty years during which the insurance system has been in operation. The number of fatal accidents, for example, per 1000 insured workers in industrial corporations decreased from .77 in 1887 to .47 in 1926. The frequency of accidents involving total permanent disability similarly decreased from .73 in 1887 to .05 in 1925. The figures for temporary disability are not of special significance because of the tendency of rates to increase owing to improved reporting of accidents.

An alternative method of throwing light on industrial hazard is through the study of mortality from accidental causes, classified by occupations. Although these figures include accidents not only from industrial but from other causes as well, industrial hazards are the chief factor in producing differences in accident mortality for persons in different occupations.

The only satisfactory statistics of occupational mortality on the basis of which industrial hazard can be measured are for England and Wales. Statistical analyses, made every ten years since 1890, show the relative importance of accidents as a factor in mortality in different occupations. A selection of hazardous and non-hazardous occupations with their comparative mortality from accidents according to the latest available figures, those from 1910-1912, are given in Table VII.

The distribution of accidents according to degree of disability and severity of the injury caused, as already suggested, is fraught with some difficulty on account of the variable definitions of the accidents which are in practise included in the statistics. Especially in case of minor accidents are the statistical differences likely to produce differences in their apparent frequency. For purposes of presenting a fair picture of the relative frequencies of fatal accidents, those causing permanent disability and those causing temporary disabilities over varying lengths of time, the standard accident table compiled by Dr. I. M. Rubinow is presented in slightly abridged form as Table VIII. This table is based upon a careful analysis

and comparison of the available statistical materials on the severity of industrial injuries in the United States and European countries.

TABLE VIII

DISTRIBUTION OF 100,000 ACCIDENTS ACCORDING TO
DEGREE OF DISABILITY CAUSED *

DEGREE OF DISABILITY	NUMBER OF ACCIDENTS
Fatal	932
Dismemberments	2,323
Loss of left arm	64
Loss of right arm	95
Loss of left hand	50
Loss of right hand	61
Loss of one or more fingers or their phalanges	1,323
Loss of one leg	129
Loss of both legs	3
Loss of toes	57
Loss of one eye	465
Loss of one eye with injury to other	62
Loss of both eyes	14
Permanent total disability other than dismemberment	110
Permanent partial disability other than dismemberment	2,442
Disability of 1-10 percent	672
" " 11-20 "	728
" " 21-30 "	378
" " 31-40 "	265
" " 41-50 "	179
" " 51-60 "	92
" " 61-70 "	92
" " 71-80 "	36
Temporary disability	94,193
Less than 1 week	37,113
1-2 weeks	23,925
2-3 "	12,433
3-4 "	6,970
4-5 "	4,427
5-6 "	2,732
6-7 "	1,695
7-8 "	1,130
8-9 "	942
9-10 "	565
10-11 "	471
11-12 "	377
12-13 "	283
13-26 "	933
Over 26 weeks	197
Total	100,000

* Source: Rubinow, I. M., "A Standard Accident Table as a Basis for Compensation Rates" in American Statistical Association, *Publications*, vol. xiv (1914-15) 358-415.

The causes of industrial accidents are a primary object of inquiry. The conception of cause has undergone considerable modification. Early ideas of responsibility led to a classification according to the responsibility of employer and of employee, with a considerable residuum of accidents attributed to the general hazard of the industry. The fundamental idea that lies

TABLE IX
CAUSES OF INDUSTRIAL ACCIDENTS IN SELECTED COUNTRIES *

CAUSE	PERCENT DISTRIBUTION OF ACCIDENTS								UNITED STATES	
	AUSTRIA	BELGIUM	FRANCE	GERMANY	NETHER- LANDS	NORWAY	SWEDEN	CALI- FORNIA	MASSA- CHUSETTS	
Machinery	22.6	7.2	7.2	23.1	9.1	17.7	20.4	10.7	27.0	
Prime movers	0.6	.5	.2		.5	.1	.3	.3		
Transmissions	1.3	1.7	.6		.7	1.5	1.0	1.1		
Working machines	20.7	5.0	6.4		7.9	16.2	19.1	9.3		
Hoisting apparatus, cranes	1.8	.6	.6	5.9	3.2	3.0	2.8	1.1	—	
Boilers, steam pressures, ex- plosions	.2	.4	.1	.5	.1	.2	.2	1.0	4.4	
Furnaces, flames, conflagra- tions	—									
Explosive substances	.7	—	.1	2.1	.1	2.0	.3	4.6		
Hot and corrosive substances	4.7	4.8	5.5	4.0	8.6	2.7	4.0			
Collapse, fall and handling of objects	14.7	35.4	29.4	15.0	11.0	13.5	6.4	33.4	29.1	
Fall of ballast, etc.		—			—	2.3		8.1	3.6	
Falling in, etc.		.2			—	11.2				
Collapse of piles, pieces of wall, etc.		5.9			.8	—		25.3	25.5	
Chutes, falling objects, etc.		13.4			10.2	—				
Handling of objects		15.9			—	—		25.3	25.5	
Falls of persons	13.5	18.3	18.5	11.6	17.0	21.1	8.2	13.4	12.7	
Loading and unloading by hand	15.3	10.2	14.7	9.7	14.5	12.2	19.0	—	—	
Vehicles and animals	12.6	10.9	5.7	15.5	6.2	3.8	11.7	11.9	7.4	
Animals	—	2.2		1.1	.6	—	1.1	2.1	.7	
Animal-drawn vehicles	4.6	1.9			—	3.8	4.1			
Funiculars, vehicles on rails, etc.	—	—		4.0	—	—	5.8	9.8	6.7	
Crushing by vehicles	—	—								
Automobiles, bicycles, etc.	—	—			1.1	—	—			
Railways		—			3.1	—	.3			
Metalled and stoned roads	7.9	.9		9.8	.8	—	—			
Navigation			5.9	—	—	—	—			
Hand tools	.1	—		.6	.6	—	.4			
Hand tools	7.8	7.4	6.6	4.0	12.0	5.0	15.6	9.4	8.0	
Miscellaneous	6.1	4.8	11.3	8.6	17.8	18.8	11.4	14.5	11.4	
Electricity		.1	.2	.7	.6		.3	.6	.6	
Flying chips, splinters, etc.		4.2	—	—	3.3		—	—	—	
Compressed air, gas, etc.		.2	.1	—	—		.1	—	—	
Stepping on objects		—	—	—	—		.9	8.2	5.0	
Other causes		.3	11.0	7.9	13.9		10.1	5.7	5.8	
Unknown causes		—	.3	—	—	—	—	—	—	

Note to original: "Austria: annual statistics of 1909, accidents disabling for over 28 days. Belgium: quinquennial statistics of 1906, accidents disabling for more than a week. France: factory accident statistics of 1913, accidents disabling for more than 4 days. Germany: annual statistics of 1920, accidents disabling for more than 91 days (agricultural accidents excluded). Netherlands: statistics of 1906, accidents disabling for more than 2 days. Norway: statistics of 1904-1906, accidents disabling for more than 28 days. Sweden: statistics of 1919, accidents disabling for more than 3 days. California: statistics of financial year 1920-1921, all 'tabulatable' accidents. Massachusetts: statistics of financial year 1918-1919, all 'tabulatable' accidents."

* *Source:* International Labour Office, Studies and Reports, series N (Statistics) no. 3, *Methods of Statistics of Industrial Accidents* (Geneva 1923) p. 13.

back of the present day analysis is prevention. In the United States the basis of classification by causes has been studied by a committee of the International Association of Industrial Accident Boards and Commissions, whose classification scheme has been adopted by the United States Bureau of Labor Statistics and by a considerable number of states. The League of Nations has published the cause classification schemes used in various countries.

Details regarding the principal causes of accidents in the steel industry in the United States have already been furnished in Table iv. This indicates the general character of the cause classification. In other industries the various causes are, of course, of varying importance; each industry needs special data on causes in order to ascertain the direction in which preventive efforts should be turned.

Table ix shows the relative importance of the several causes in seven European countries and in two states of the United States. The marked variations in the percentages of accidents caused by machinery, for example, may be due to differences in the relative importance of mechanical industries, or to differences in the advancement of the safety movement, or perhaps to differences in the assignment of causes in classifying the statistical material.

In addition to causes, what may be termed "causal factors" are of great importance. These are of two groups—those concerning the workers and those concerning the work. Among the first are age and sex of the worker, his race or nationality, his mental and physical condition, fatigue and his attitude toward his work; among the second are the length of the work day, speed and intensity of work, and provision of rest periods. Space is lacking to do more than suggest lines of investigation in two or three of these topics.

Special studies have been made of the influence of fatigue upon the causation of accidents. Data on the relation between the occurrence of industrial accidents and the hour of the day in general show an increase in accidents during the morning hours to a maximum at about eleven o'clock, a falling off as the noon rest period approaches; and an increase during the afternoon to a maximum for the day a short time before the end of the afternoon's work. This analysis indicates that fatigue, though perhaps not the sole element in the situation, is probably an important factor in the rising frequency rate of accidents during the progress of

the day's work. A study of the relation between accidents and fatigue was made by the U. S. Public Health Service during the war period in the form of a comparison between the frequency of accidents in an eight-hour and in a ten-hour plant. In this study the frequency of accidents was measured not only in terms of time of work but also in terms of output. Important studies of the relation between accidents and fatigue have been made during and after the war by the Industrial Fatigue Research Board in Great Britain.

Statistics on the relation between age and frequency of accident are available for German experience, and indicate that accident frequency rates increase with age.

TABLE X
ACCIDENT FREQUENCY RATES BY AGE AND SEX,
GERMANY, 1897 *

AGE	ACCIDENT FREQUENCY RATES PER 1000 INSURED		
	BOTH SEXES	MALE	FEMALE
Under 16	2.4	2.7	1.6
16-17	3.2	3.6	1.6
18-19	3.6	4.3	1.3
20-29	5.4	6.2	1.6
30-39	9.2	10.1	1.9
40-49	12.3	13.6	2.5
50-59	13.8	15.3	3.2
60-69	14.2	16.0	2.6
70 and over	8.5	9.9	1.1

* Source: Manes, Alfred, "Unfallversicherung" in *Wörterbuch der Volkswirtschaft* (3rd ed. Jena 1911) p. 1094. Rates for "industry, construction and seafaring."

So far, however, as the liability of accident of young persons just commencing work is concerned, such figures are inconclusive, because the occupations in which young persons are employed are often not of the same character as those in which older persons are engaged. Employment of children in dangerous occupations is prohibited. Lower frequency rates for young persons may thus indicate simply the greater safety of the types of occupations in which they are predominantly engaged.

That physical or mental ill health is a frequent cause of accidents needs no statistical proof; but statistical evidence is lacking because of the difficulty of obtaining data on exposure and on accidents classified in comparable fashion as to condition or type of sickness.

Prevention of accidents and minimizing their

consequences through prompt first aid are the primary objectives toward which both statistical analysis and safety work are aimed. Theoretically, at least, all accidents should be prevented. A study of the magnitude of the problems emphasizes the need for prevention, and a study of the causes of accidents and of the conditions that produce them points the way to methods by which they can be prevented.

Methods of prevention may be directed toward removing a specific cause, bettering or remedying a condition that favors accidents, or stimulating and promoting safety. Responsibility for making industry safe is most effectively placed with the management; this responsibility is in practise made effective by shifting the burden of cost of workmen's compensation to employers. Insurance companies assist in promoting safety through inspection and through rating systems. The actual introduction of methods of prevention is a matter for the technical expert or safety engineer.

A large group of accidents caused by machinery can be prevented by designing machines so as to eliminate the source of danger. Guards are introduced to cover exposed moving parts, to enclose gears, belts and moving chains, so that workers are unable to place their hands in places where they can be injured. Laws to require the provision of machine guards have been generally enacted, and are enforced by routine inspection. Commissions have been set up with administrative power to issue safety regulations. Such regulations are for the most part directed toward the provision of safe work places, although in certain cases unsafe practises of employees are forbidden.

A striking development of recent times is the organization of safety departments in industrial establishments. These departments are charged with responsibility for preventing industrial accidents. They are commonly placed in charge of safety engineers who study the causes of accidents and introduce methods of eliminating and preventing them.

A second direction of effort involves the systematic study and elimination of points of hazard throughout an entire establishment. The manner of routing supplies, of placing machinery with reference to the location of aisles, the quality of illumination, the use of motive power, the substitution of electrically driven single unit machines for the older type of machines driven by exposed belts, are all studied with reference to the possibilities of

reducing accidents. In building new establishments, in particular, the layout of the plant is planned with especial reference to eliminating hazards.

These methods of prevention call for technical skill. Each type of machine may require some special device to render it safe. In using electric power automatic devices are required to cut off the electricity before repairs can be made on the machinery. Elevators require special safeguards. The various devices that have been developed for different specific hazards are illustrated in exhibits at safety museums.

Another method of prevention is the provision of special clothing to guard against particular types of hazards. The wearing of goggles with non-splinterable glass is necessary in occupations where workers are exposed, as in work in foundries, to flying particles of metal. Another illustration is in the use of shoes which can be slipped off immediately in occupations in which workers are exposed to splashing molten metal.

Another type of preventive effort is directed toward the education of employees in safety practises and toward stimulating them to cooperate with employers in reducing accidents. These educational campaigns include safety talks for workmen and foremen, and utilize posters and various types of educational material. In particular they make use of the spirit of rivalry in different departments of the establishment or in different establishments in order to obtain the best record in safety.

Personnel selection may be used to reduce accident frequency. Physical examination of workers with special reference to their liability to particular types of accidents is an important method. In railroad operation the elimination of color blind engineers and firemen is a familiar illustration of this type of personnel selection. The examination of employees with reference to their physical condition may extend also to temporary illnesses, and it may provide that employees who are not up to their normal physical standard of health shall be excused from their usual occupations where these involve any considerable degree of risk.

The training of workers in the special requirements of their work is an important method of accident prevention. Records indicate that an unusual proportion of accidents occur within the first few days after a worker begins work on a new type of machinery. In other words, during

the learning process accidents are frequent. If a sufficient training period is allowed, the frequency of accidents during this initial stage may be materially reduced. Careful personnel work includes fitting employees to their positions, providing suitable rest periods and, if necessary, psychiatric treatment to produce the best adjustments.

An important question relates to the proportion of accidents which are preventable. Recent estimates by Sidney J. Williams put preventable accidents at 75 percent. These estimates are supported by the experience of various industries in reducing accidents with the introduction of safety work. For example, in establishments in the steel industry the accident rate has been reduced 75 percent since undertaking systematic safety work.

A study made by the Travelers Insurance Company suggests that 98 percent of all accidents can be prevented. This estimate is reached on the basis of an analysis of a considerable number of accidents. It was found that in practically all cases the accident could have been prevented if the employers had been held responsible for introducing known methods of prevention, including close and watchful care over the physical and mental condition of their employees. In support of this view that practically all accidents can be prevented certain remarkable records for safe operation of industry can be cited. One record is of ten million hours of employment without a lost time accident. Other long runs have been made by enlisting the cooperation of employees in the prevention of accidents. Accidents can be prevented by eliminating all hazard producing causes and conditions in industry, using methods suggested through careful study.

ROBERT M. WOODBURY

See: ACCIDENTS; INDUSTRIAL HAZARDS; FATIGUE; CHILD LABOR; COMPENSATION AND LIABILITY INSURANCE; EMPLOYER'S LIABILITY; WORKMEN'S COMPENSATION; SAFETY MOVEMENT; SHORT HOURS MOVEMENT; REHABILITATION.

Consult: U. S. Bureau of Labor Statistics, *Bulletins* as follows: no. 276, "Standardization of Industrial Accident Statistics" (1920); no. 298, "Causes and Prevention of Accidents in the Iron and Steel Industry, 1910 to 1919" (1922); no. 339, Chaney, L. W., "Statistics of Industrial Accidents in the United States" (1923); no. 395, "Index to Proceedings of the International Association of Industrial Accident Boards and Commissions, 1914-1924" (1925); no. 425, "Record of Industrial Accidents in the United States to 1925" (1927); no. 439, "Handbook of Labor Statistics, 1924-1926" (1927); also *Bulletins* nos.

157 (1915), 201 (1916), 234 (1918) and 256 (1920); "The Methods of Statistics of Industrial Accidents" in International Labour Office, *Studies and Reports*, series N (Statistics 1923-) no. 3; Eckert, J., Hartmann, O. K., and Paul, O., *Handbuch der Reichsversicherung* (Berlin 1926) p. 135-43; Florence, P. S., *Economics of Fatigue and Unrest* (London 1924) ch. x; Goldmark, Josephine, *Fatigue and Efficiency* (New York 1912) pt. i, p. 71-79 and pt. ii, p. 192-213, containing reprints of foreign material on industrial accidents; Newbold, E. M., "A Contribution to the Study of the Human Factor in the Causation of Accidents" in Great Britain, Industrial Fatigue Research Board, *Report no. 34* (London 1926); Vernon, H. M., "An Investigation of the Factors Concerned in the Causation of Industrial Accidents" in Great Britain, Ministry of Munitions, Health of Munitions Workers Committee, *Memorandum no. 21* (London 1918), and *Industrial Fatigue and Efficiency* (London 1921) chs. x-xi; Williams, S. J., "Industrial Accidents" in American Engineering Council, *Waste in Industry* (New York 1921) ch. xiv; Woodbury, R. M., *Social Insurance; an Economic Analysis* (New York 1917), and *Workers' Health and Safety, a Statistical Program* (New York 1927) pt. i.

ACCLIMATIZATION is the process by which an organism becomes adapted to a new climate. The test of acclimatization is not the survival of the individual, but of the species or variety. Acclimatization occurs frequently among plants and animals, as appears in the fact that wheat, potatoes, horses, hens and many other species thrive in climates very different from those where they originated. The same is true of man; early man almost certainly migrated into many climates and then became acclimated; modern man is doing likewise. Acclimatization is often accompanied by changes which adapt the organism to the new environment, e.g. the shaggy coat and small size of Shetland ponies, the hairiness of mountain primroses, and the colors of the human skin and hair.

Acclimatization depends upon two fundamental laws. First, every species is subject to climatic limits imposed by temperature, humidity, sunshine, wind and other factors. Within certain limits the individual can survive; within more restricted limits it can permanently reproduce its kind. Second, every species thrives best under definite conditions of climate. But the optimum for vegetative growth may differ widely from the optimum for reproduction. Moreover the optimum and the limits vary appreciably from one individual to another.

The physical optimum for Europeans involves a mean temperature of about 65° F. for day and night together; a relative humidity averaging about 80 percent; and an interdiurnal

variability averaging not far from 3° F. There is some evidence, although not conclusive, that under modern conditions of clothing and housing the optimum for mental activity is an outdoor temperature averaging not far from 40°. On this basis the optimum climate for the white man satisfies the following requirements: midday summer temperature from 70 to 75° F.; winter nights frosty; air moist enough to form dew or frost at night, and relative humidity at noon rarely below 50 percent; storms numerous so that weather is variable and average change of mean temperature from day to day is about 3°. Southeastern England approaches these conditions, but nowhere does the white race live under the absolute optimum of climate.

The main problem of acclimatization centers around the white man in the moister parts of the tropics. The permanent British settlers in northern Australia, the Americans in Hawaii, the Dutch in South Africa and Java, and the Spanish and Portuguese in Latin America are said to prove that white acclimatization in the ordinary sense is possible. Opponents of this view point out that Australia, Hawaii and South Africa are only sub-tropical, in Java there are very few Dutch children of the third generation, while in Latin America people of pure European descent are rare outside the cool highlands and even those few are dark skinned.

The Australian studies of Sundstroem probably indicate the real truth. Among healthy white people living permanently on the edge of the tropics he found that the composition of the blood and the general functioning of the system differ slightly but systematically from those of the white people in cooler climates. Practically all students of the problem agree that life in the tropics tends to produce nervous instability—neurasthenia—among white people. Such conditions do not necessarily prevent the production of healthy children, but they appear to induce a state of physiological stress, and presumably decrease the resistance to disease although this has not yet been demonstrated. More extreme conditions of the same kind doubtless prevail where the climate is more steadily warm and moist. Whether they would prevent the rearing of healthy children if tropical disease were eliminated, no one yet knows. The Japanese reactions to climate are almost identical with those of Europeans. It may be significant that in September at the end of the hot, damp, debilitating summer, which

simulates a tropical climate of the more humid type, the conceptions that give rise to living children in Japan, where there is no birth control, are only a little more than half as numerous as in June, and are fewer than the deaths. Moreover, even though tropical diseases may be eliminated among selected groups of both whites and natives, their general elimination among the hundreds of millions of tropical natives is at best a matter of many generations.

The diversity of opinion as to tropical acclimatization arises partly from failure to appreciate natural selection. Constitutional peculiarities, both physical and temperamental, permit some persons to thrive under temperatures and humidities which are almost intolerable to others. Among the thousands of people who contemplate a tropical sojourn, the health or temperament of themselves or their families reduces the sojourners to hundreds, while only tens remain permanently and few of those have families. Thus the white parents who bring up families in moist tropical climates are a very highly selected group. They either possess peculiarly vigorous, adaptable constitutions, or have climatic optima which tend toward the tropical type. Yet even their descendants are weeded out very actively by death, sterility or migration. Thus a healthy European child of the third generation in the tropics represents a highly extreme type and is no indication of what might happen to large groups of people under similar conditions. Even if tropical diseases should everywhere be conquered and the most rigid selection should segregate a fairly well acclimated white stock, we do not yet know whether the vigor of such a stock would equal that of the ordinary stocks in cooler climates.

ELLSWORTH HUNTINGTON

See: CLIMATE; ADAPTATION; ADJUSTMENT; ENVIRONMENT; STRUGGLE FOR EXISTENCE; POPULATION; MIGRATION; IMPERIALISM.

Consult: Huntington, Ellsworth, *Civilization and Climate* (3rd ed. New Haven 1924); Castellani, Aldo, and Chalmers, A. J., *Manual of Tropical Medicine* (3rd ed. London 1919) p. 39-146; Sundstroem, E. S., *Contributions to Tropical Physiology, with Special Reference to the Adaptation of the White Man to the Climate of North Queensland*, University of California Publications in Physiology, vol. vi (Berkeley 1926); Cilento, R. W., *The White Man in the Tropics* (Melbourne 1925); Balfour, Andrew, "Sojourners in the Tropics" in *The Lancet*, vol. cciv (1923) 1329-34, and "Problems of Acclimatization" in *The Lancet*, vol. ccv (1923) 84-87, 243-47; Eijkman, C., "Some Questions Concerning the Influence of Tropical Cli-

mate on Man" in *The Lancet*, vol. ccvi (1924) 887-93; Wickens, C. H., "The Vitality of White Races in Low Latitudes" in *Economic Record*, vol. iii (1927) 117-26, and in Royal Society of Victoria, *Proceedings*, n.s., vol. xl (1927-28) 17-24; Sayers, R. R., and Davenport, S. J., "Review of Literature on the Physiological Effects of Abnormal Temperatures and Humidities" in United States Public Health Service, *Public Health Reports*, vol. xlii (1927) 933-96; Hoffman, F. L., "Problems of Mortality and Acclimatization in the Central American Tropics" in International Conference on Health Problems in Tropical America, *Proceedings* (Boston 1924) 657-708; Trewartha, G. T., "Recent Thought on the Problem of White Acclimatization in the Wet Tropics" in *Geographical Review*, vol. xvi (1926) 467-78.

ACCOMMODATION is to be differentiated from adaptation, although both are forms of adjustment. If adaptation is defined as structural changes in the organism which take place through biological variation and selection, the term "accommodation" may be reserved for functional changes which take place in the habits and customs of persons and groups and which are socially rather than biologically transmitted. This distinction between biological and social adjustments was first made by J. Mark Baldwin, who perceived in accommodation the process by which "old habits are broken up, and new coordinations are made."

Franklin H. Giddings appears to be the first social scientist to make systematic use of the term accommodation, although in the limited sense as one among several modes of the universal method of conflict. Gabriel Tarde employed the term to denote the resolution of the conflict between two opposing ways of acting and the emergence of a new pattern of behavior. Georg Simmel, without himself using the term, described and analyzed the process of accommodation in its interrelations with the process of conflict. Robert E. Park and E. W. Burgess place accommodation with competition, conflict and assimilation as the four chief processes of social interaction. They point out that these social processes tend to create different types of social order: competition resulting in the economic equilibrium; conflict, in the political order; accommodation, in social organization; and assimilation, in personality and the cultural heritage.

Social organization is the sum total of accommodations to past and present situations. All the social heritages, traditions, sentiments, culture, technique, are accommodations; they are acquired adjustments that are socially and not biologically transmitted.

Historical societies have been organized around different forms of accommodations such as slavery, caste and classes. These types of social organization involve different patterns of social adjustment between dominating and subject groups. Stages in accommodation to conflict situations may be arranged in a series as follows: domination, toleration, compromise, conciliation and conversion. A *modus vivendi* is a special form of accommodation whereby persons or groups in conflict are enabled to carry on certain necessary activities without resolving the points in dispute.

Accommodation groups, organized to articulate with the environing social order, like clubs, social classes and vocational groups, castes, denominations and nations, are to be differentiated from groups organized for conflict, such as gangs, labor organizations, employers' associations, and middle class unions, races, sects and nationalities. The transition from a gang to a club, from a sect to a denomination, and from a nationality to a nation, discloses the process by which a group achieves equilibrium in its milieu.

The equilibrium maintained by accommodation, whether in a society, group or person, has been subjected to internal as well as external description and analysis. Simmel's statement of the reciprocal nature of superordination and subordination; Moll's study of rapport; the essays of James and others upon religious experience; the development of the concept of sublimation—all indicate the insight to be secured by research upon the role of attitudes in the process of accommodation. Life histories and personal documents are found to be valuable materials for research on the original conditioning and subsequent changing of attitudes involved in accommodation. Attitudes of race prejudice, of superiority or inferiority, and of loyalty may be transmitted to the members of a group by tradition, or they may be the outcome of certain crucial experiences of persons or groups. Changes in attitudes in the process of social adjustment to new situations may take place suddenly or gradually. Mutations, or sudden accommodations, occur under crisis situations, such as invention, migration, disaster. Gradual accommodations are the less perceptible changes seen in the process of acclimatization, naturalization and of maintaining equilibrium.

Accommodation, or the process of making social adjustments to conflict situations by maintaining social distances between groups and

persons which might otherwise come into conflict, is to be differentiated from assimilation, which is the process by which cultures and personalities interpenetrate and fuse. An illustration is seen in the accommodation of the immigrant in his adoption of dress, food, habits and language, without himself fully participating in the cultural heritages and common purposes of his adopted country by which his children are assimilated. It follows that while assimilation takes place in situations of primary, personal and intimate contacts, accommodations typically are arrived at by formal and external arrangements.

The concept of accommodation has so far found its most fruitful use in studies of immigration, colonization and race relations. It will also be found of value in research in social conflicts, adjustments in labor problems, industrial relations, community organization and political parties, as well as in the study of the social psychology of subordination and superordination, social status, social types and leadership.

ERNEST W. BURGESS

See: ADAPTATION; ADJUSTMENT; ASSIMILATION, SOCIAL; ACCLIMATIZATION; CULTURE; SOCIAL PROCESS; CONFLICT, SOCIAL; COMPETITION; SOCIOLOGY.

Consult: Park, R. E., and Burgess, E. W., *Introduction to the Science of Sociology* (2nd ed. Chicago 1924) ch. x; Baldwin, J. M., *Mental Development in the Child and the Race* (3rd ed. New York 1906) ch. xvi, p. 452-57; Simmel, Georg, *Soziologie* (3rd ed. Munich 1923) p. 101-85, 250-56, ch. iii tr. by A. W. Small as "Superiority and Subordination" in *American Journal of Sociology*, vol. ii (1896-97) 167-89, 392-415; North, C. C., *Social Differentiation* (Chapel Hill, N. C. 1926) p. 227-52.

ACCOUNTING, in the broad sense of the term, includes all the business records kept by a business organization or unit of government, as well as the principles and technique involved in establishing and maintaining the records. It covers two general groups: first, statistics and memoranda relating to production, properties and other non-monetary quantities; and second, financial records representing investment, expenditures, receipts, fiscal changes and standing, expressed in monetary units. In the narrower sense, as ordinarily used and as treated in this article, it relates to the second class of records. The other records, however, are of great business and public importance; they are usually integrated with the more formal system of accounting dealing with financial categories. A modern railroad company, for instance, maintains in addition to records of

monetary transactions, records of service, physical operations, employees, materials, locations and changes of property.

HISTORY. The history of accounting reveals very clearly the constant interdependence of accounting knowledge and business requirements. Progress in the science and technique of accounting has made possible an increase in the size, complexity and territorial scope of business operations. Conversely, these business changes have spurred the advance in accounting knowledge and technique. The kind of records that are needed depends upon the business, but the kind of business that is possible depends upon the records that can be kept.

Accounting goes back to the earliest times of doing business. The simplest of commercial transactions, repeated period after period, required some sort of record. The invention of the system of double-entry, which is fundamental to complete financial statements, cannot be definitely credited to any particular person. There is evidence that it was employed even during Phoenician, Greek and Roman commercial supremacy and it was extensively developed and applied during the great Italian commercial era of the fourteenth and fifteenth centuries. After commercial leadership passed to Holland and England, it was introduced and greatly developed in the accounting houses of the great trading companies. The system depended upon "hand" efforts, and became formalized as to procedure and related books. There was the "day book," which recorded all the business transactions in chronological order. From the day book the items were restated chronologically in the "journal," and analyzed into "debits" and "credits" by accounts. Finally, from the journal the items were entered in the "ledger" to individual accounts. Cross checks and balances were established to maintain accuracy of records. This mechanical system continued until the expansion of business that followed in the wake of the industrial revolution.

The new impetus started about 1840 in Great Britain with the organization of railroad companies and the great growth of manufacturing and trading concerns. It followed to the United States and other countries with the extension of large business organizations and has been hastened by mechanical inventions and cumulative business pressure. During the past fifty years the old formalism has been discarded in large business, but still prevails in smaller

undertakings. Short cuts and adaptations are employed according to possibilities and needs. Specialized records are provided as conditions require. The old day book has been replaced by various forms of original records, kept according to convenience. The formal journal remains only as a record of special accounting adjustments which do not represent original transactions. The old ledger is replaced by special ledgers, subdivided and grouped according to the needs of each organization. But underlying all the sub-ledgers and the various original and intermediary records, the old principle of double-entry controls. The various ledgers are so organized that they are finally brought together in a comprehensive whole, as represented periodically by the balance sheet and the income statement. In large businesses, moreover, there is usually a "general ledger" which is based upon the subsidiary ledgers; this usually preserves in a single book complete financial records of the business, including assets, liabilities and operations, and also contains the accounts which appear directly in the balance sheets and income statements. It is based upon double-entry, and serves as a "control" of the several subsidiary ledgers.

The development in accounting practise during the past fifty years has paralleled business development. The great size of business units has involved increasing complexity as to kind of activity, diversities of property and extent of territory, and the accounting systems have followed the organization of business concerns. Each managerial unit of a large corporation must be completely informed with respect to the properties and activities for which it is responsible. The head of the corporation must have before him such general accounts and records that he can maintain constantly a comprehensive grasp of the entire business, its financial standing, its operating activity, its costs and returns and the interrelation of the larger units. These general records must bring together the various departments, whether organized by functional or by territorial lines or by a combination of the two. Each department head must have similar records for his domain, which may represent both a territorial and a functional subdivision. Extending down the line, each unit head depends upon exact records to exercise control and to keep his part coordinated with the wide ramification of the business. Consequently the amount and variety of accounting work needed by a large

modern business concern are enormous. Modern accounting requires coordinated organization, expert division of labor, use of machinery and labor saving devices. It depends upon intricate equipment, mechanical billers, adding machines, typewriters, tabulators and classification machines. Without such facilities modern accounting would be impossible: the great bulk could not be handled, and the cost would be prohibitive.

Numerous special factors have influenced the development of accounting. With the growth of business, there has been increasing need of accurate records of physical property, particularly as operation has involved various kinds of property in large quantities, scattered over wide areas of territory. To meet this situation, continuous inventories have been developed and coordinated with the general accounting system. For manufacturing concerns, it has become increasingly necessary to have reliable cost records, both for the fixing of sales policy and for comparison of results between individual plants under the same ownership. Exact performance data are essential to furnish a gauge of the relative efficiency of plants or operating units. Statistical devices have been incorporated with the accounting system, to supply analysis, to furnish checks upon activities and to promote improved methods of production or management. With the fluctuations in prices or monetary values, it has become necessary for the management to know not only what its actual costs have been, but also what the present costs would be, and what the relative costs are between various units in different localities under the same control.

A large factor in modern accounting development has been the growing control of government over business. Detailed accounting classifications have been prescribed by government commissions for the utilities subjected to public regulations. The companies are required to file annual reports with the commissions, for which uniform provisions are made. Special tax reports are required for local, state and federal governments; the necessary data must be provided through the regular accounting channels. Through these and other relations to business, government has furnished a powerful spur to accurate accounting procedure, better classification and technique; if it has not actually originated new methods, it has exerted an influence in extending the best private practise to all business units in the same field.

While the modern tendency has been away from formalism, to adjust the accounting to business needs, there have been also strong forces for standardization and uniformity. In part, standardization has been promoted by the various governmental regulations. It has been stimulated even more by the demands for comparable data of trade and financial organizations, such as the stock exchange, financial publications, bankers, investors and trade associations. As business has become larger, its strictly private aspects have diminished, and its public character has been augmented. An underlying uniformity of classification has become desirable both as to property and other balance sheet accounts, as well as in respect to operating costs, sales, sources of revenue and other operating data.

Along with the vast extension of accounting practise, there has grown up an accounting profession, which has become variously specialized in fields of accounting investigation, analysis and system installation. Auditing firms, which are themselves organized businesses, make periodical investigation of the accounts of business houses required for a great many public and private purposes (see AUDITING). Accounting specialists have also become prominent in connection with various kinds of financial litigation which require technical knowledge and accurate analyses of costs, returns and operating results. Similar studies are made for the purpose of reorganizations, promotion of efficiency, and consolidations. They are required in wage controversies, especially before arbitrators or government bureaus, and are even more necessary in connection with utility rate controversies before the federal, state and local tribunals.

The profession of accounting has become established on a par with law, medicine and other learned professions. The varied accounting activities involve public interests and require assured ability, training and reliability. To safeguard the public, the accounting profession has become organized and regulated by law. Many countries have made provisions for certified or chartered public accountants, who practise within the requirements and protection of the statute, and have formed special organizations in the interests of accounting. Such regulations and organizations developed earlier in Great Britain, because of earlier business conditions requiring professional standards. In

Great Britain the profession was thus organized between 1850 and 1880, while in the United States corresponding organization was not started until about 1895, when the New York Society of Certified Public Accountants was established. In continental Europe the recognition of accounting as a profession was much slower in coming. Associations of accountants in these countries were local in character and intended primarily for the protection of common interests. Only after the World War has rapid progress been made and a semi-public status been granted to these associations.

Coincident with this rapid evolution in accounting, there has come a great intellectual interest in accountancy. This is indicated by the new type of books on accounting, by the special accounting journals that have appeared and the character of articles published, by the numerous accounting materials contained in economic and financial publications, and especially by the inclusion of accounting studies in the educational system of the country. A generation ago, bookkeeping of a formalistic type was occasionally taught in the public schools, but was for the most part confined to the special "business colleges," which were generally of low academic grade. During the past generation, however, accounting has come to be a recognized department in every modern high school, and now appears in most of the colleges and universities as a part of the discipline for undergraduates who expect to enter general business. Schools of commerce with programs of study centered in accounting have emerged and grown with amazing rapidity in our large cities; graduate schools of business administration have appeared, and provide opportunities for an intensive study of accounting. In the graduate departments of our universities, accounting has become recognized as worthy of academic tolerance because of its effectiveness as a tool for economic research. Understanding of accounts is now a requisite of modern business preparation, not only for professional accountants, but also for business managers, bankers, lawyers, engineers, economists, in short all who must deal with costs, earnings, business affairs, governmental operations, and activities of public control.

THEORY. Although many old forms and conventions have been discarded, modern accounting is still based on the principle of double-entry, or that of an equation of financial trans-

actions. On the one side are all the so-called debits, and on the other all the credits; the sum of the first equals the sum of the second. The accounts are subdivided according to the needs and convenience of the business, but they always constitute a balancing equation.

When a business is first organized, the accounting begins with the receipt of money or other equivalent values invested in the undertaking. A double entry record is kept, first, of the money or other values placed in the enterprise, and second, of the source of the investment. There is an obvious equation; the amount of cash or other values received is debited to one account, or to a group of accounts, while the same sum is credited to the source or sources from which the values were obtained. The cash or equivalent values constitute assets or property of the business, and a separate record or account is kept of each class of assets. The original entry is a debit or charge to the appropriate asset or property account. On the other side of the equation, the same amount is credited to the particular source or sources from which the assets were derived. The accounts may be of individual owners; stockholders, common and preferred; or bondholders and other creditors who conveyed cash or other assets to the business. The sum of the debits thus represented by the various asset accounts is, necessarily, equal to the sum of the credits entered to the various groups from which the assets were obtained for the establishment and operation of the enterprise. Ordinarily, at the inception of a business, the assets are in the form of cash, and the source is represented by a single individual or by a small group. A modern corporation, however, may begin with a great variety of assets, already classified according to convenience, and with many sources from which the properties were derived. However simple or complicated the beginning, the results are the same: the asset or property values debited to the asset or property accounts are equal to the sums credited to the various sources from which the assets were obtained for the purposes of the enterprise.

After the inception of a business, the accounting is concerned, on the one hand, with recording the changes that take place in the various assets, and, on the other, with the changes in the sources or the relative rights in the assets. The cash with which the business starts is expended for other assets or property

required for operation. These changes must be recorded in the proper asset accounts as each is specifically affected. An addition to any particular class of assets is debited or charged to the particular asset account; the disposal of a particular asset is credited to the appropriate account; the difference between the debits and credits of any asset account is the balance of the particular asset in so far as it is represented in the total equation.

In regard to the original credits showing the sources of the funds contributed to the business and hence the rights to the assets, these accounts are ordinarily not affected by the transfer of assets that takes place in the course of operation. The sources or rights at the beginning are represented by owners or creditors, and they are subdivided according to individuals or groups. Each account starts with a credit entry; subsequently, as any change takes place, increases are credited, and decreases are debited. The balance of each particular source is thus shown at any time by the difference between the credits and the debits of the account, and in the total equation it is represented upon the other side by an equal amount of net assets.

The accounts which record the source of funds or interest in the business are usually termed liabilities. This is a comprehensive term, covering all accounts which normally show a credit balance at any particular time. It is used because of its convenience, and is fully understood by accountants; otherwise it might be misleading since it includes not only interests represented by actual liabilities or debts of the business, but also other sources, original capital contributions, reserves accumulated for various operating purposes and profits or surplus derived from operation. The term, however, has been established, and conveniently distinguishes the entire group of credit accounts from the asset accounts which show debit balances at any particular point of time.

The business starts with an equation stating the assets and the source of the assets. Every business transaction is subsequently recorded as it affects the various kinds of assets and the different sources, and thus constantly preserves the equation. All operations involve intrinsically an exchange of some assets for other assets, i.e., goods are bought and sold. There is thus a constant recording of the assets affected with purchases and sales; with every transaction the

proper asset accounts are debited and credited. The object, however, is to obtain more assets in each round of purchase and sale. This involves not only a mere change or turnover of assets, but also a net increase in assets, a new source element in the equation. The net increase in assets is represented by the profit or surplus, which constitutes a separate source or interest, and at any point of time appears as a net credit in the special account (or debit, if there is a loss).

Operation is divided into regular periods, usually a year, with further subdivisions by months or shorter intervals. Within each accounting period, the various fiscal changes are recorded as the transactions take place. Each account is debited or credited as it may be affected. At the close of the period, each account is balanced so as to show its net status at the particular time. For each asset account, all the debits are added; the sum of the credits is deducted from the sum of the debits, leaving a net debit balance as the book value of the particular class of property. Likewise in respect to any liability or source account; at the close of each accounting period, the sum of the debits is deducted from the sum of the credits, and the balance is a net credit for the particular source or interest in the business. These balances are then brought together in a balance sheet, which, under recognized American practise, presents the assets on the left side, according to the classification employed, and the liabilities on the right side, classified according to various sources or interests. The balance sheet thus presents, at the close of each period and for the beginning of the next, the financial status of the business.

During a period of operation in between balancing, it is necessary or convenient to introduce special or temporary accounts to record the transactions. In a large business, these accounts include elaborate classifications of purchases and sales, operating expenses and revenues or manufacturing costs and trading, all pertaining to the particular period. All these interim accounts, however, record only such fundamental changes as above explained, and serve merely for the convenience of periodical calculation. At the close of each period, all these accounts are brought together and are presented as an income statement (or profit and loss account, or under some other title). The net results show the net profits or losses of the period; they are then carried to the

balance sheet, which shows the extent to which the assets were derived from past profits of operation (or the extent to which assets were dissipated by past losses of operation).

The accounting system thus requires a classification according to the purposes of the business, not only of the various asset accounts and the various sources of the assets, but also of the periodical processes of operation. For merchandising, this involves a coordinated group of purchase and sales accounts and inventories, together with the wages and materials and other expenses connected with current operation. For a manufacturing concern, it includes systems of cost-keeping to show for each period the costs of the commodities produced.

A great deal of public attention has been given to the accounting systems of railroads and public utilities. For such purposes, elaborate classifications of operating expenses have been established to show the various costs incurred during each period in respect to the services furnished for which revenues are collected or accrued. So far as principle or accounting technique is concerned, there is no fundamental difference from the operation of merchandising or manufacture. Operating expenses represent charges or debits to individual accounts for cost of service instead of cost of commodities. For the service rendered, the revenues are accrued and collected. At the close of each period, the operating accounts are brought together in appropriate groups, as an income statement, to present the results in the most desirable form for the management and the public. The net returns (or losses) are then carried to the balance sheet, and are presented as in any other form of business.

The classifications for railroads and public utilities have particular significance, because of the special public interest in such properties. These are concerns distinguished from ordinary business, in that they are vested with public rights and are particularly subject to rate regulation by public authority. Rates must be reasonable, and, for the most part, the measure of reasonableness is the cost of service, including a fair return on the property used in operation. While other considerations enter into the determination of rates, an accurate record of costs is essential. There is, thus, a special public significance in railroad and public utility accounting. For the most part the systems now in use have been prescribed by the commissions

and have the force of law for the companies. The Interstate Commerce Commission has elaborate railroad and other classifications, as to property, balance sheet accounts, operating expenses, revenues and income accounts. Uniform systems for the various utilities have been prescribed by several state commissions. The purpose of all such classifications is to determine the cost of service, including the separate cost of every important phase or function of operation.

In all such classifications, it is important from the public standpoint, as well as from that of the management, to preserve clear distinctions between costs that are properly chargeable to asset or capital accounts, and those chargeable to operating account to be included in the determination of the cost of service for the particular fiscal period. There is, ordinarily, no difficulty in preserving the proper line of demarcation. The charges to operating expenses include all costs which belong to the service rendered during the particular accounting period. They include all labor and materials used directly in operation; in the case of railroads, for example, the wages of trainmen and the cost of coal used in train movements; in electricity, the powerhouse labor and fuel; for gas, the cost of labor, coal, oil and other materials used for gas production. These are all costs that are directly identified with the service supplied, and are properly included in operating expenses of the period.

Operating expenses, however, include not only all such direct labor and materials used in service, but also the cost of maintaining the property, together with the depreciation chargeable to the particular accounting period. The object is to keep the net property accounts intact; to include in operating expenses all such charges as will preserve the net investment in the fixed capital of the utility, and to add to capital account only improvements and extensions to the property. In regard to maintenance and depreciation, there is greater difficulty in preserving the distinction between proper charges to capital and to operating account.

The established policy is to charge all repairs and minor renewals of property to the operating expenses of the accounting period. True, for strictly accurate accounting there should be separation between periods, because repairs made in any one period are usually due to operation of prior periods; in practice, however, such classification is not feasible. For the most

part also, there is an equalization of such costs from period to period, so that the expenses are presented usually with reasonable accuracy in relation to the service rendered. Moreover, to avoid variation in operating expenses from one period to the next a number of periods are usually considered when it is desired to establish the normal cost for the purposes of rate control or executive decision.

The difficulty referred to in respect to repairs and minor renewals appears especially in regard to depreciation or the allowance for the renewal of major units of physical property used in service. While repairs, including the renewal of all minor units of property, tend to equalize themselves, there is much greater variation in renewals from period to period for the larger or major units of property. To charge the cost of all such renewals directly to operating expenses, would result in material distortions and would not be satisfactory for either administrative or rate-making purposes. To prevent this inequality, the so-called depreciation policy instead of the direct renewal costs, has been employed in determining the charges to operating account. The cost of any unit of property with a limited lifetime must, in any case, be finally included in the cost of operation by the time it is replaced. The method of depreciation distributes or allocates to operating expenses the cost of any such unit during its lifetime in service. If an article is consumed or used exclusively during one period, its entire cost belongs to operation of that period. If it be used for a number of periods, its cost must be divided between the periods on the basis of relative use.

Railroads and all public utilities, as well as large industrial plants, consist of huge operating properties the individual units of which have varying years of service. In respect to all such units, the capital cost must be replaced through charges to operating expenses, and thus included in the stated cost of service. For strict accounting, it is necessary therefore to make separate provision for each major unit. Schedules of property must thus be made, showing the unit costs, the expected life and the annual charge for depreciation. The last two items are estimates based upon experience and expert knowledge of operations; still the actual life or total serviceability of a unit of property may turn out to be at considerable variance with the estimate. The management must, therefore, keep in constant touch with the properties,

and should be prepared to modify the estimates as the conditions require.

The usual accounting procedure is to charge depreciation to operating expenses for each period, and to credit the amounts cumulatively to the depreciation reserve, which appears as a credit item in the balance sheet. As actual physical units are retired, their original cost is credited to the property account and charged to depreciation reserve, with adjustments for salvage; the cost of renewals, as of all new property installed, is then charged to the appropriate property account. With this general plan, the sum of the balances of all the property accounts at any time shows the original cost of all the properties then in use, while the balance of the depreciation reserve shows the amount of such costs that have been allocated to past operating expenses as depreciation, and included in the cost of service. The difference between the sum of the property accounts and the depreciation reserve is the net property cost applicable to future operation, to be provided for through subsequent depreciation charges included in future cost of service or output.

While depreciation is usually credited to and accumulated in separate reserves, which are required by most of the official accounting systems, the credits might be made directly to the property accounts, with the same net results in the allocation of costs between capital and operation. If such direct credits were made to the individual property accounts, the balances from time to time would show the net cost after depreciation, instead of the original cost of the property left in service. The setting up of depreciation reserves is preferable, because it furnishes more complete records. It preserves the cost of all properties in use; shows periodically the cost of properties retired, and presents in a single figure the amount of depreciation provided for on account of properties left in use.

The Interstate Commerce Commission has required detailed depreciation provisions for each class of equipment, and for the individual units in each class. It will extend the same general requirement hereafter also to the road accounts, without extending it to the individual units since they cannot be as readily individualized as the items of equipment. The classifications prescribed for utilities by the state commissions impose much less detailed treatment. For the most part, the state commissions have merely the right to prescribe uniform

systems of accounting, including the accounts for systematic allowance for depreciation; but they have not had the power to compel the companies to make proper charges for depreciation. As a result, there is wide variation in practise, and the experience to date has been of little value for rate making purposes or for executive control of the properties. Every important rate adjustment has required a separate inquiry as to depreciation, without regard to the provisions actually made by the company through its regular accounting procedure.

Satisfactory administration of rate making largely depends upon the adoption of a systematic cost system. As yet, however, accurate cost accounting in relation to property, maintenance and depreciation, is not accepted as even the controlling factor in fixing rates, and for that reason principally regulation has not been as satisfactory from the public standpoint as had been expected. Effective regulation depends upon definite standards and upon exact facts not subject to dispute. The existing system, where it is not based upon costs, arouses conflict of interest between the companies and the public, and thus results in litigation instead of mere administration of rate making policies.

Apart from regulation and the enforcement of a public interest in property or business, the question of valuation of business properties for accounting purposes has received a vast amount of discussion among accountants and analysts interested in accounting data. One group insists that all the accounts must rest strictly upon monetary costs, both as to property and as to charges to operation or manufacturing output. The second group agrees that all operating expenses, and all direct labor and material charges conveyed to manufacturing costs, should be based upon cash expenditures. As far as property accounts are concerned, however, the latter holds that the amounts should be revised from time to time to bring each account in conformity with the actual conditions of the business at the time of the balance sheet. If property values have risen or fallen, the fact should be recognized in the accounts and in the corresponding showing of the balance sheet of the business.

Apart from public policy or individual business expediency, there is little fundamental principle in the issue thus presented. If there is a special public interest in a business, the rights of the public should be clearly expressed

and safeguarded through the accounting and business records. The public interest thus determines the basis of valuation that should be adopted for public purposes. Where there is no special public interest, the private business purposes must determine the policy to be carried out through the accounts.

All purchases, expenditures, sales and revenues are recorded, in the first instance, at the actual monetary consideration at the time of the transaction. In regard to this practise, there is no difference of opinion as to desirability of procedure. There must be accurate original records of the transactions that actually take place. Subsequently, so far as the property accounts are concerned, it is a matter of expediency, of wise business administration, whether the original costs shall be continued, notwithstanding fundamental changes affecting the industry, or whether a revaluation shall be made from time to time. If the original costs are retained, then the accounts will show constantly actual cost records as to property; such records are of themselves desirable and important to the management. If, however, conditions have changed materially, such records carried into the balance sheet would be misleading as to the showing of financial standing. The property may be grossly understated or overstated as compared with the reasonable value at the time of the balance sheet. The statement of surplus would merely represent the result of the annual accounting as carried into the balance sheet, and would not be based upon the actual values contained at the time in the business. The balance sheet may be intended on the other hand primarily to present a cost statement as to properties in the business and their sources, or to set forth as correctly as possible the real property values and the actual relative rights of the various interested groups. Neither purpose can be taken as fundamental and controlling. Each may be carried out consistently; both may be represented by two different sets of statements. The important consideration is that the objective is clearly conceived, and that the facts are accurately presented accordingly.

The basis of valuation with changing fundamental conditions has a bearing also upon the statements of operating expenses, or manufacturing costs, and the computation of annual profits. In regard to depreciation, for example, shall the charges to operating expenses or to manufactured products be based upon the

original money cost of plant units, or upon the market value of similar property at the time of the operation? A consistent cash system would hold to original cost; but if the level of property costs has materially changed since the particular units in use were installed, such a basis for determining depreciation charges, while presenting accurate cost records, would fail to furnish a desirable guide to sales policy under prevailing conditions. What is to be done depends upon the purpose of the management, and not upon inflexible principles of accounting. Depreciation charges may be based quite properly upon revaluation or expected renewal costs rather than upon original costs of the properties. Likewise any accounting entries may be validly changed with shifting conditions in the business. It is important, however, that the purpose be clearly established and that the character of the accounting be correctly presented.

The basis of accounting adopted finally affects the computation of annual profit shown by the business. If original cost is rigidly adhered to, the showing of annual profit and the accumulated reserves and surplus would all reflect cash cost and disregard the changes in values that may have affected the business. A depreciation reserve thus established may be excessive or inadequate for the physical renewals of property. A surplus thus accumulated may have no relation to the actual value attached to the ownership of the business. The accounts, however, would state the facts of cash costs incurred by the business. If periodical adjustments are made according to changing conditions, they would affect, in the first instance, the property values, and would then require a redetermination of reserves and statement of surplus. If property values are materially increased, the depreciation reserve would have to be augmented proportionately with the higher level of expected renewal costs, and surplus would be increased according to the higher showing of net property values. Neither reserve nor surplus as stated in the balance sheet would thus be identified with the periodical depreciation accruals and the statements of income. But if the revaluations are properly made the results would reflect the actual financial standing of the business at the time of the balance sheet.

In this matter of valuation, there is also finally involved the item of good will, so far as private business is concerned. If the object is to present financial standing, the total value

would be materially affected by the character of the management, location, business connections and other facts, which, taken together, determine the good will of the business. A complete present statement would include, first, the physical properties valued on the basis of costs at the time of the balance sheet, plus the good will valued according to earning power in excess of the return required to support the physical properties. There is often little significance in the valuation of physical plant, especially where this consists of fixed properties which can be used only for the particular business. The ultimate basis of plant value is financial success, and the stated physical values may be inadequate or excessive in relation to established earning power.

These considerations lead to calculation of intangible values, as distinct from the physical properties subject to independent appraisal. Accountants, generally, are opposed to including intangibles which are based upon earning power, even if they favor revaluation of physical properties. If the purpose, however, is to show actual financial standing, the showing is manifestly incomplete if it presents merely physical properties and not the actual values of the going concern. As to the various purposes and policies, accountants tend to conservative positions; and, for the most part, hold that the purpose of accounting is to show costs, and not values. They argue that costs represent actual cash outlays which are accurately reported and can be definitely carried out through the entire system of accounts, both in respect to the allowance for depreciation and all charges to operation and manufacturing output, as well as in respect to property and source accounts shown in the balance sheet. If it were desirable to show values, they would make a separate determination which would set out independently of the accounts not only the physical values, but also the good will (or opposite) dependent upon earning power, and would present the reserves and surplus accordingly. Such showing, however, they would not incorporate with the regular accounting procedure, but would preserve as separate records.

In conclusion, it is important to emphasize that accounting has to do with fiscal records, and that all policies and methods depend upon the purposes to be achieved. In the first place, there is the distinction between properties affected with a special public interest and those not so affected. As to the first group, the ac-

counting system must be based upon the character of the public interest, and upon the objects to be attained through regulation. In private business not affected by public interest, the accounting follows the purposes of the management; this applies particularly to the adjustments in values made subsequent to the recording of original transactions. The first records must, of necessity, represent what was actually done. What changes are made subsequently, depend upon the purposes of the management. The conceptions to be carried out must be clear, and the corresponding records must be kept accurately.

Accounting is an instrument of public policy and of private management; it is adaptable to any purpose and any condition. It is not a set of fixed rules or unbending principles to be followed without regard to public or business objectives. It is essential for public and private purposes, and it is a means for their achievement.

JOHN BAUER

See: ACCOUNTS, PUBLIC; COST ACCOUNTING; AUDITING; FINANCIAL STATEMENTS; MANAGEMENT; BUSINESS ADMINISTRATION; VALUATION; DEPRECIATION; APPRECIATION; GOOD WILL; RATE REGULATION; PUBLIC UTILITIES; BUSINESS ETHICS; BUSINESS EDUCATION.

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ACCOUNTS, PUBLIC, may be said to be almost as old as organized government. Of course in the ancient days they were very rudimentary in character. For almost two centuries after the earliest printed work on book-keeping, which was written by a monk, Luca Paciolo, and published first in Venice in 1494, such development as took place in accounting (if it may be dignified at that period by the

use of this term) related mainly to the requirements of business and commerce. Perhaps the first real attempt to bring the accounting methods of government abreast with those of business was made by Colbert under Louis XIV of France during the latter part of the seventeenth century. By the end of the eighteenth century England had begun to develop a national financial system which laid considerable emphasis on the accounting features. This system was finally established on its present basis by the Exchequer and Audit Act of 1866. In the United States public accounting did not receive much attention until the opening of the twentieth century. Its development has been greatly stimulated by the movement for budgetary reform during the last two decades.

Before the introduction of budgetary methods in the United States, public accounts provided little more than a general record of financial transactions and served mainly as the means of enforcing, within certain limits, the provisions of law with respect to appropriations. They did not furnish the type of information that the executive needed in directing administrative work or that the legislative body might use in determining the fiscal policies of the government. But this situation has been considerably improved during the last twenty years. The accounting systems of several of our governmental units now comprehend all financial transactions and produce information relating thereto with promptness and accuracy. They provide, to some extent at least, the necessary data for planning and executing the government's work, thus serving, as they had not done before, the purposes of day-to-day administration.

Public accounting has been influenced in no small degree by the methods and practises followed in commercial accounting. In fact efforts have been made to carry the essentials of commercial accounting directly into government accounts. The capital balance sheet, for example, has thus been made a part of the accounting system of many governmental units. Perhaps this tendency has been due to the fact that oftentimes the responsibility for installing a system of public accounts has fallen upon accountants who were experienced mainly in commercial work and who did not fully appreciate either the scope or the financial requirements of government.

The purpose of a government is quite different from that of a business concern. The

latter tries to make profits, while the former does not. The business concern keeps down its expenses in order to increase its income; the government keeps down its expenses in order to diminish its income. It would therefore seem that the accounting system of the business concern is not entirely suited to governmental needs. Indeed such system must be greatly modified or devised on a different basis when applied to the government. It must be designed not to show profits but to furnish the information required in maintaining a balanced relation between the income and the outgo of the government. Of course where undertakings of a business nature, such as utilities, are publicly owned and operated, it is often advisable to apply accounts of a commercial type, particularly when these undertakings are conducted on a self-supporting or profit making basis. But this is not true of the major departments of government; they are not self-sustaining and, besides, they are non-profit making.

The modern public accounting system comprehends a series of more or less related records which may be divided into general accounts and cost accounts, the latter being detailed accounts relating mainly to expenditures. The general accounts, which are largely of a summary character, are the means of exercising control over income and outgo; they also express the financial condition of the government. The cost accounts support the general accounts; they supply detailed information, principally with respect to operating expenditures, which is needed in conducting administrative work.

Cost accounting is a recent development which had its beginning in the rapid growth of industry starting about 1900. As applied to industry it has perhaps been developed more extensively in the United States than in any other country. But it is as yet not widely applied to governmental functions, being limited largely to public works activities, certain institutional services, and publicly owned and operated utilities. The present movement to improve the quality of public administration is, however, stimulating the wider application of cost accounting to governmental operations.

A detailed discussion of the actual forms and the day-to-day procedure of keeping public accounts is beyond the scope of this treatment. Suffice it to say that these are matters which are largely determined by the financial requirements of the government and the information that is to be produced. Modern devices and

appliances are now being used in connection with the accounting systems of many governments. For example, loose leaf and card ledgers have largely displaced the old bound ledgers; the former are more satisfactory and effect a material saving in time. Ledger postings are now performed mechanically, the account being posted, the items added up, and a balance struck by one operation. The number of operations in recording and handling financial transactions has also been greatly reduced. In the billing of taxes, for instance, sufficient copies of the original bill are made by a single operation on a machine to cover each successive step in the procedure of payment, thus saving time and reducing the possibilities of error. Tabulating machines are now regarded as being indispensable to the accurate and speedy production of cost data or any detailed accounting analyses, such as the distribution of expenditures by objects.

In common practise public accounts are usually kept on the cash basis, that is, they merely record the moneys actually received and disbursed by the government. They furnish information only with respect to settlement and liquidation; they supply no data concerning revenues and receipts due the government or expenditure obligations incurred by the government. The latter data are necessary to the exercise of real budgetary control. Such data, as well as the information regarding settlement and liquidation, are produced by accounts kept on the accrual basis. When the accrual basis is used, the accounts indicate just where the government stands at any time during the fiscal year in the realization of its income as authorized by the adopted budget; they also show the free and unencumbered balance of every appropriation.

The accrual basis of accounting has not yet been widely adopted in government, although it is almost universally used by business and industry. The English and French accounting systems are still on the cash basis. In the United States the accounting systems of the national government and of the majority of state and local governments are also run on the cash basis, although authorities on public finance have long recommended the adoption of the accrual basis. Accounting systems on the accrual basis have recently been installed in a few state governments and in several city governments.

There is no direct supervision on the part of

the national government of the United States over the accounting systems of the state or local governments. However, several states supervise the accounts kept by local governments within their respective jurisdictions. This supervision relates mainly to the form of the accounts and to the procedure followed in rendering financial reports, the purpose being to bring about some uniformity. Frequently it extends to an audit of the local accounts by an officer or agent of the state government.

From a structural standpoint a necessary feature of any government is the centralization of its accounts, particularly the general accounts, in a single office. This has been the recent trend of development in American cities, especially those with the centralized mayor or the manager forms of government. Today the most advanced type of organization for keeping the general accounts consists of an office under the control of the executive, which is usually a bureau or division in a larger department of finance. This office is headed by a chief accounting officer with the title of controller, since no moneys are paid into or out of the treasury without his approval. He is responsible for supervising the entire accounting system of the government and for supplying the executive and his budget officer with the information required in financial management. There is also an independent audit of the books kept by the controller, which is usually conducted by an officer or agent responsible to the legislative body.

This type of financial organization with respect to the accounting work has not as yet been widely adopted by the state governments of the United States, Massachusetts and Virginia being the only states that have so far accepted the scheme practically without modification. The national government is now in the process of devising a central accounting system. When completed it will no doubt be installed in the General Accounting Office under the direction of the comptroller general, an agent of Congress. The president and his budget officer will then have to depend largely upon an office over which they have no control for the general information needed in executing the budget. Furthermore the comptroller general will in effect be the auditor of his own accounts. This arrangement, it appears, will lack some of the safeguards and much of the effectiveness of the British system. In England the accounts are under the supervision of the treasury, which is

the great executive department of finance, and the comptroller and auditor general, an agent of Parliament, performs the independent audit of these accounts and reports his findings to Parliament.

A. E. BUCK

See: ACCOUNTING; AUDITING; COST ACCOUNTING; ADMINISTRATION, PUBLIC; GOVERNMENT REPORTING; FINANCIAL ADMINISTRATION; BUDGET; PUBLIC FINANCE; EXPENDITURES, PUBLIC; TAX ADMINISTRATION; MUNICIPAL FINANCE; GOVERNMENT CORPORATIONS.

Consult: *A History of Accounting and Accountants*, ed. by Richard Brown (Edinburgh 1905) pt. i, chs. ii-iv; Woolf, Arthur H., *A Short History of Accountants and Accountancy* (London 1912) chs. i-viii; Oakey, Francis, *Principles of Government Accounting and Reporting* (New York 1921); Morey, Lloyd, *Introduction to Governmental Accounting* (New York 1927); Smith, Darrell H., *The General Accounting Office, Its History, Activities and Organization*, Institute for Government Research, Service Monographs of the United States Government (Baltimore 1927); Buck, A. E., *Public Budgeting* (New York 1929) chs. vi-vii, xvi-xvii; Cleveland, Frederick A., *Chapters on Municipal Administration and Accounting* (New York 1909) chs. viii-xiii; Eggleston, DeWitt C., *Municipal Accounting* (New York 1914); Buck, A. E., and others, *Municipal Finance* (New York 1926) chs. v-vi; Durell, A. J. V., *Principles and Practice of the System of Control over Parliamentary Grants* (London 1917) chs. iii-v; Jèze, G., *Cours élémentaire de science des finances et de législation financière française* (6th ed. Paris 1922) bk. i, pt. vi, ch. ii; Schwarz, Otto, *Formelle Finanzverwaltung in Preussen und Reich* (Berlin 1907); Valentini, G. B., *Organismi finanziari contabili e di risconto nello stato*, with a preface by Alberto de Stefani (Milan 1924); Monetti, Ugo, *Le amministrazioni centrali dello stato e l'ordinamento dei controlli; i ministeri, le ragioni centrali, la ragioneria generale dello stato, la corte dei conti*, Biblioteca di ragioneria applicata, vol. i, no. 1 (Turin 1926); Possaner von Ehrenthal, Benno, *Systematische Darstellung des österreichischen Staatssachen- und Verrechnungswesens* (Vienna 1902); Maass, A., *Das Kassen- und Zahlungsverwesen des Staates im Königreich Belgien* (Stuttgart 1911) ch. vi.

ACCUMULATION is, literally, a heaping up of good things; generally, a gathering together of valuables, as of cattle into herds, goods into stocks, lands into holdings, or securities into estates; and, technically, a setting aside of current resources to serve future purposes. In this stricter sense it is a process in both individual and social economy. The individual accumulates against a future contingency, such as unemployment, the education of children, dependency in old age; or he builds up an investment from which he expects an income. The community, through the acts of its several

members, stores up "capital," or "resources devoted to further production." The forms, the processes and the ends of accumulation respond to the changing circumstances of society.

In pre-industrial communities the ways of accumulation present great variety. The group, or the individual, makes provision against a future emergency by conserving the fruits of a harvest to last until the next one; by hoarding the overflow of fat years to overcome the dearth of lean ones; by commuting perishable commodities into hides, tobacco, trinkets or other durable goods in which values can be stored until the purchasing power is wanted. The individual makes sure of a future living by establishing himself in a trade, buying an office, acquiring a privilege, building up a landed estate, or lending out moneys at usury. An organized society attempts to make less precarious its future by increasing its flocks or boats or tools, building a dam against a turbulent river, dispossessing a neighboring tribe of fertile lands, increasing its store of ceremonial objects, or maintaining sorcerers to propitiate the gods of fertility.

Under different methods of organizing the economic community, the ways of increasing productive wealth present a like variety. In a feudal society an exaction of customary dues produces manor houses, enriched estates and churches. In a craft system, where simple trades are skilfully practised, the spare time of workers is converted into the needed increment of tools. In a self-sufficient agricultural economy a distribution of tasks between seasons provides a time for the making of fences, the erection of barns, and the creation of other "improvements." In a communal regime, where all labor may be conscripted, a group is released from other activities and appointed to the construction of "mighty works." Always, everywhere, the ways of personal and social accumulation are rooted in trade practise, traditional lore, accepted custom and social organization.

In contemporary society accumulation takes its character from the structure of industry. The larger process breaks apart into the more or less distinctive activities of saving, investment, the equipping of industries, and capitalization. In saving, the active agents are the individual, the corporation and the state. The individual as of old may lay by goods or hoard coins; but his surplus is usually a sum of money to be put to productive use. The corporation sets aside a part of its earnings to be used in its business.

The state allocates a portion of its revenues to "public improvements." An enlargement of the province of government and an expansion of business have increased the demand for providence on the part of the state and the corporation; their current contribution to the volume of savings is estimated to be well above one third of the whole.

In the process of accumulation these savings are transmuted into the equipment of industries, or "capital goods," through investment. The conversion may be direct. An individual puts his money back into his business by increasing his stock or enlarging his shop. A corporation uses its surplus to improve its plant or to better its facilities. A state expends money in digging canals, erecting school houses and public buildings, and in making roads. Or the conversion may be effected indirectly through the agency of "the capital market." The investment broker, who is a middleman in handling accumulations, undertakes for a price to find productive uses for savings and savings for productive uses. Since many streams of savings must be coordinated with the needs of many businesses for funds, the activities which make up investment demand organization. Accordingly there has arisen a vast and intricate mechanism of stock exchanges, security markets and investment houses. It is through the mediation of this interlocking network of financial institutions that such accumulations as go to market are converted into the equipment of developing industries.

The practical test of the value of accumulations comes in the wake of investment. The value of the public works of the state is usually not set down in pecuniary terms; they are held of little or great account according as they are used and are appreciated. The accumulations of voluntary associations, in the form of churches, universities and hospitals, are appraised by those who control them in terms of the social ends they serve. But where industry is under business control, the market is called upon to evaluate the accumulations of individuals and of corporations. This ever continuous process is called capitalization. Accumulation has its beginning in the expectation of creating a valuable property; in the end this expectation may or may not be realized. If it is, the value is kept intact, and it may even appreciate. If it is not, the original saving is not easily to be withdrawn from the rather rigid stores, machinery, buildings and good will in which it is invested,

and depreciates. As a result of this constant revaluation capitalized accumulations may have very different values from those they possess as savings. Yet it is the capitalized value which determines how well the end which prompted saving has been realized.

In the literature of the subject the urge to accumulation has most often been set down as "the effective desire of the individual to save." A prudent man distributes his income over a period of time in such a way as best to serve his needs. A bit of uncertainty ahead quickens the incentive to save; an assurance of adequate future income invites more generous spending. The urge is strong in the forward looking individual and weak in the prodigal. It is stimulated by a rise in the rate of interest and retarded by a decrease in the reward of thrift. The volume of accumulations emerges as the result of countless individual judgments in each of which the utility of saving is nicely balanced against its cost.

In current writings accumulation is increasingly charged to the account of social conditions. Its foremost compulsion has come to be the opportunity which modern industry affords for the use of savings. So long as a rural economy and a petty trade prevailed, the demand for industrial equipment was small. The individual laid by against his own necessity; he accumulated wealth that he might give again to relieve distress or exact an uncanonical increment from persons in need. But with the coming of industrialism there has arisen a great demand for funds with which to launch enterprises, build up businesses, and create markets. It has been ingeniously contrived, by those who must have capital, to tempt the most unlike individuals to bring to the investment-market generous shares of their incomes. The timid have been baited with stocks and bonds which have combined safety of investment with small returns; the adventurous, with uncertain securities, a few of which bring to their holders rich prizes and the rest little or nothing. The active person has felt the lure to go adventuring with his own funds; the passive one has had his chance at gain through vicarious enterprising. An ingenious device called insurance has combined provision for an emergency with the creation of an estate. A market for savings, with its aggressive salesmanship and list of offerings accommodated to every variety of mind and temperament, has been brought to everyman's door.

A corresponding change in social values has stimulated the urge to accumulation. In the earlier days of Christendom the getting together of possessions was frowned upon as self-seeking. The words of the Gospels had put it beyond doubt that the soul's salvation demanded abstinence from worldly goods. "Lay not up for yourself treasures upon earth" had been thundered from the pulpit and enforced in the penitential, and doctors in theology had not yet interpreted away the plain import of the words. The addition of the command to "industry" brought the beginning of the change. In time a developing technology and increased national resources caused personal industry to be rewarded by handsome returns; the injunction to frugal living kept expenditures down; and the emerging surplus was the church's unwitting contribution to accumulation. Little by little "thrift" was elevated to the dignity of a cardinal virtue in what has been called "a holy economy"; and Puritanism became a powerful instrument in the formation of capital. Eventually its reward came to be possessed of a like value with thrift itself, the possession of vendible assets came to be a badge of honor, and only gains from the most unsavory sources were cursed as "tainted wealth." The resulting prestige which attaches to having and holding is today a great incentive toward accumulation.

It follows that the urge upon the individual to lay by varies with circumstances. An increase in income, a ready opportunity for gain, an assurance of security, an exposure to the homily of thrift, a worship of possessions promote accumulation. A decline in earnings, an ignorance of tempting opportunities, a fear of risking hard earned savings, a way of life that disposes one to take each day as it comes, an absorption in activities to which the market gives little support retard accumulation. A lag of habits of life behind a rising income makes savings almost inevitable; a lag of income behind an established way of life renders them well nigh impossible. In competitive accumulation the newcomer, who does not have to keep up appearances, has one decided advantage over the native with an established position to maintain. The upgrade of the business cycle encourages saving, the downgrade retards it; the maintenance of industry toward full capacity, even though it invites freer spending, promotes accumulation. In a society at any time, in respect to the effectiveness of the urge, the population may be divided into a number of

"thrift classes." To the captain of industry accumulation is inseparable from everyday activity; to the recipient of funded income it may be costless; to the professional man it may exact a toll in a loss of opportunity for personal attainment; to the unskilled worker it may mean a deprivation which is intolerable. But neither the classes nor the volume of savings is fixed; a satifying society is more likely to save than one which is satified; a period of transition is more favorable to accumulation than one of stability.

In like manner the savings of the corporation and of the state are rooted in opportunity, in value and in circumstance. The corporation cannot set aside a surplus unless its earnings permit, its directorate is sensitive to forward planning, and the business invites reinvestment. Earnings are of course not to go into improvements and betterments unless an adequate return is expected. But the matter presents no simple choice of the larger value; for, no matter how great may be the promised rewards, rarely are investments made outside the direct line of business. Moreover the discretion of those who decide is hemmed in by definite obligations to various classes of stockholders. Often reinvestment is due to sheer necessity; for, if funds can be found for expansion, there is opportunity for bigger things, while if they cannot, the corporation is likely to lose its business to a more enterprising competitor. Frequently a small group, who direct a capital many times their own holdings, have a chance to expand the business without the hazard of a loss of control which attends the sale of new securities. Always the creation of a surplus for reinvestment is an aspect of the policy of the corporation inseparable from its general aims and activities. The accumulations of the state are designed to meet clearly recognized needs of the population; they are rooted in considerations of public policy and are designed to serve ends which cannot be set down in pecuniary terms.

In the continuous and complex process of accumulation it is usual to find a social function. It is the way through which society "secures its capital," or "produced wealth is dedicated to future production." The discovery comes easily to those who see a single articulate process through which savings are without waste and with dispatch commuted into "capital goods." It comes with difficulty to those who regard saving, investment, the equipping of industry, and capitalization as loosely connected activ-

ities. It seems clear that the larger purpose is to be found within the myriad of individual, corporate and governmental doings; but the lesser activities do not serve the larger end with an undivided allegiance. Not all savings become investments. If there is a laying by for a future emergency there is a withdrawal to meet a present one. If personal income minus spendings equals savings, often personal income plus savings equals spending. In insurance it is the permanent fund, into which premiums go and out of which claims are paid, that goes to the capital market. In any period the increment in investments is to be found by subtracting withdrawals from savings. Nor are investments converted into a mass of industrial equipment of exactly the same value. In the capital market the broker takes his toll of the funds he handles, since even investment bankers must have a living wage. The use of commercial credit for investment purposes, the ratio of bank loans to deposits, the custom of paying for "financial services" in securities of a new corporation, the many usages which make of the capital market a distinctive institution, interpose between the number of dollars saved and the number which represents the value of the resulting "wealth devoted to further production." Nor do the initial values of consummated investments necessarily abide. There may be losses through the fallibility of human judgments, through a physical decay of goods whose values are not preserved through a charge for depreciation, through changes in technology which rob plant and equipment of their effective capacity to produce, or through a changed demand that will have none of the product. Thus between the initial savings of its members and a "permanent fund of social capital" there lies a network of institutions each of which has its wastes and its hazards. The current arrangements are a passing rather than a definitive provision for supplying the material equipment of the industrial system at a minimum of social cost.

The process of accumulation has often been called "social provision for the future." In the early days of industrialism, when it seemed that everything was possible if only funds were to be had, the term was not inexact. It is at least a question how much of a mass of capitalized values which primarily serves the gainful ends of individuals and corporations can be called social provision. Besides, there are other ways in which the community attempts to make the

future more secure: by the promotion of knowledge, the encouragement of technology, the advance of the industrial arts; by the establishment of customs and habits, such as the shorter working day and the constructive use of leisure, which tend to enrich human life; by the discovery, development and conservation of human resources; by making economic organization a better instrument for ordering the material means of living to serve its ends. The "investment" of savings in the improvement of institutions which may be passed on from generation to generation is an ancient and established way of providing for the future. At this point accumulation loses its identity in the larger process of enriching a developing cultural heritage.

WALTON H. HAMILTON

See: ACQUISITION; HOARDING; THRIFT; ABSTINENCE; CAPITAL; WEALTH; CAPITALIZATION; INVESTMENT; SAVINGS; FORTUNES, PRIVATE; WEALTH, NATIONAL.

Consult: Böhm-Bawerk, E., *Kapital und Kapitalzins*, 3 vols. (4th ed. Jena 1921), vol. ii tr. by W. Smart as *The Positive Theory of Capital* (New York 1923) p. 100-18; Cannan, E., *Wealth* (London 1914) p. 120-38; Hobson, J. A., *Work and Wealth* (New York 1914) p. 89-105; Johnson, Alvin S., "Influences Affecting the Development of Thrift" in *Political Science Quarterly*, vol. xxii (1907) 224-44; Friday, D., articles in *New Republic*, vol. xxix (1921-22) 64-67, vol. xxxiii (1922-23) 270-73, vol. xxxvii (1923-24) 304-05 and vol. xlii (1925) 65-67.

ACCURSIUS (1185-1263), jurist, born in Florence, a pupil of Azo at Bologna and professor there of Roman law. Accursius' great work is the *Glossa (ordinaria)* on the whole *Corpus Iuris*, finally summing up the results of the Bolognese school of Glossators. In courts following Roman law it virtually superseded the text (*Quidquid non agnoscit glossa nec agnoscit curia*) nor was it displaced there when dethroned in the schools by the humanists. It is immensely important not only for this reason but also because it is the great storehouse of information as to the Glossators, information which is still valuable for the interpretation of Roman law. Opinions vary greatly concerning its intrinsic merits; the best view rates them high. This work of Accursius is easily accessible in all early editions of the *Corpus Iuris*, but its serious use requires technical knowledge.

F. DE ZULUETA

Consult: Savigny, F. K. von, *Geschichte des römischen Rechts*, 7 vols. (2nd ed. Heidelberg 1834-51) vol. v, p. 262-305; Landsberg, Ernst, *Die Glosse des Accursius* (Leipsic 1883) p. 52-63.

ACHELIS, THOMAS (1850-1909), German sociologist and anthropologist. He studied philosophy and philology at Göttingen and from 1874 taught at the gymnasium in Bremen. From 1898 he edited the *Archiv für Religionswissenschaft*. His studies in anthropology reveal a certain philosophical-psychological trend which formed a contrast to the materialistic-physiological emphasis prevailing in Germany at that time; for that reason he was attacked by the Berlin school. Except for the short essay, *Rechtsentstehung und Rechtsgeschichte* (*Sozialer Fortschritt*, no. 17, Leipsic 1904), the *Soziologie* (in Sammlung Götschen, 1st ed. Leipsic 1899, 2nd ed. 1912) is his most important work in the field of social science. Because it stands somewhat in opposition to the Hegelianism still dominant in German sociology, this treatise had less influence than it deserved considering the time of its appearance. According to Achelis, sociology is a study of the forms of human association, taking as its starting point man in his biological aspects and proceeding to a psychological explanation of associations. Above all, sociology must establish in basic outlines the structures of various social formations and, where possible, try to discover the underlying laws of relationship or at least the periodically recurring rhythms. For the most part, he would therefore proceed more inductively than had been done before him in Germany. However, he is by no means extreme; indeed, in concluding his chapter on principles and methods, he demands as supplementary the consideration of "teleological necessities," because in social life motives and purposes constitute a residue not to be explained by the principle of mechanical causality.

R. THURNWALD

Important works: *Die Entwicklung der modernen Ethnologie* (Berlin 1889); *Die Entwicklung der Ehe* (Berlin 1893); *Mythologie und Kultus von Hawaii* (Brunswick 1895); *Moderne Völkerkunde* (Stuttgart 1896); *Ethik* (2nd ed. Leipsic 1900); *Die Wandlungen der Pädagogik im 19. Jahrhundert* (Berlin 1901); *Die Extase in ihrer kulturellen Bedeutung* (Berlin 1902); *Abriß der vergleichenden Religionswissenschaft* (Leipsic 1904); and the works mentioned in the text.

ACHENWALL, GOTTFRIED (1719-72), German statistician and student of public law. He studied first at Jena, where Smeitzel awakened in him a lasting interest in comparative politics and economics; then at Halle; and finally took his degree at Leipsic. After three years as tutor at Dresden he became

Privatdocent in history, statistics and the law of nature and of nations at Marburg in 1746. Upon his call to Göttingen, two years later, he wrote his first notable essay, "Vorbereitung zur Staatswissenschaft der europäischen Reiche" (1748). This became the introduction of his influential *Staatsverfassung der heutigen vornehmsten europäischen Reiche und Völker im Grundrisse* (Göttingen 1749; 6th ed. edited by his famous pupil August L. von Schläzer, Göttingen 1781; 7th ed. edited by M. C. Sprengel, Göttingen 1790-98). This used, for the first time, the term *Statistik*; it was translated into many languages and was widely imitated. It won for Achenwall the title, "father of statistics." Nevertheless his work rested on that of Conring; and the school of political arithmetic, though quite different in method, preceded him.

By statistics Achenwall meant an inclusive description, comparative when possible, of the territory, population, industries, trade, social classes and political institutions of states. Its object was to enable statesmen to formulate policies of internal development and external relations in the light of definite knowledge. The "Achenwall school" relied mainly on verbal statement, and hence lost prestige with the accumulation of census and other numerical data. They made no contribution to what is now called statistical method.

FRANK H. HANKINS

Important works: *Naturrecht* (with J. S. Pütter, Göttingen 1750); *Grundsätze der europäischen Geschichte* (Göttingen 1754); *Jus naturae*, 2 vols. (Göttingen 1755-56); *Entwurf der allgemeineren europäischen Staatshandel*, a small work on European trade (Göttingen 1756); *Staatsklugheit nach ihren ersten Grundsätzen* (Göttingen 1761); *Juris gentium europaeum* (Göttingen 1775).

Consult: John, Vincenz, *Geschichte der Statistik* (Stuttgart 1884); Meitzen, August, *Geschichte, Theorie und Technik der Statistik* (2nd ed. Stuttgart 1903), tr. by R. P. Falkner in *American Academy of Political and Social Science, Annals*, vol. i (1891) supplement; Achilles, Georg, *Die Bedeutung und Stellung von Gottfried Achenwall in der Nationalökonomie und Statistik* (Bern 1906); Schiefer, Paul, *Achenwall und seine Schule. Ihre Bedeutung für die heutige Entwicklung der Statistik* (Munich 1916).

ACKERSDIJCK, JAN (1790-1861), Dutch economist and statistician. From 1831 to 1860 he held a professorship in the faculty of law at Utrecht, lecturing on statistics, economics and history. He was a disciple of Adam Smith and spread free trade doctrines in Holland. Dutch

tariffs were modified in accordance with his views in 1845. He also effected a reminting of the coinage and pointed out ways of improving the state finances. In his travels he obtained an extensive knowledge of economic conditions in various countries and became greatly interested in statistics. As chairman of the government committee on statistics, organized on his initiative in 1858, and in other capacities he furthered the development of Dutch statistics, urging the publication of all data of importance from the social-economic point of view and the centralization of the various public statistical services.

F. PH. BICHON VAN IJSSELMONDE

Important works: *Bedenkingen over de Koren wetten* (Objections to the Corn Laws) (Utrecht 1835); *Nederlands financiën*, 2 vols. (Amsterdam 1843); *Nederlands Muntwezen* (Utrecht 1845); *Over belastingen en bezuinigingen* (On Taxes and Savings) (Utrecht 1849); "Mouvement des idées économiques . . . en Hollande" in *Journal des économistes*, ser. ii, vol. xxviii (1860) 501-09.

ACLAND, JOHN (1699-1796), an early poor law reformer, born at Woodley, Beaford, Devon, and vicar of Broadclyst in that county from 1753 to the year of his death. His familiarity with the conditions of the poor and his conviction that the existing Poor Law encouraged poverty led him to publish in 1786 a pamphlet in which he expounded "A plan for rendering the poor independent on public contributions, founded on the basis of Friendly Societies, commonly called Clubs" (Exeter 1786). The plan was the establishment by statute of a central and national society which should make provision for the support of the dependent poor in sickness, unemployment and old age; marriage and maternity bounties were also to be provided. All adult workers of both sexes were to be required to contribute and the state was to make supplementary grants. A bill to this effect was introduced in the House of Commons but received little support. The scheme anticipated in every broad detail Mr. Lloyd George's great National Insurance Act of 1911.

W. H. DAWSON

Consult: Eden, F. M., *The State of the Poor*, 3 vols. (London 1797) vol. i, p. 373, 380.

ACOLLAS, EMILE (1826-91), French politician and jurist. He earned his living in Paris as a liberal professor of law, was an active member of the republican opposition to Napoleon III and was imprisoned in 1867. In

1870 he became professor of French law at the University of Bern, where in 1871 he proclaimed his sympathy with the Paris Commune. In 1876 he was a radical-socialist candidate for the Chamber of Deputies. He was not elected even though Garibaldi endorsed his candidacy in a eulogistic letter. In 1880 he accepted the office of inspector general of prisons from the French government and thenceforward renounced politics.

The idea that democracy must be realized in laws inspired his numerous juristic works. France was to undertake a complete revision of the Napoleonic codes. Laws pertaining to the family should protect the rights of women and children; property laws were to recognize labor as the single source of property rights; laws relating to municipal government were substantially to reduce the powers of the central government. For the true goal of democracy is individual independence. Acollas opposed the principle of popular sovereignty; he preferred individualistic to authoritarian democracy.

GEORGES WEILL

Important works: *Nécessité de refondre l'ensemble de nos codes, et notamment le Code Napoléon, au point de vue de l'idée démocratique* (Paris 1866); *Enfants naturels* (Paris 1871); *Loi générale de l'évolution humaine* (Paris 1876); *Philosophie de la science politique, et commentaire de la déclaration des droits de l'homme de 1793* (Paris 1877).

ACQUIRED CHARACTERS. *See* HEREDITY.

ACQUISITION is the word within whose confines is to be found the issue between private gain and public good. In every society an attempt is made to subdue personal advantage to the service of general welfare. A tribal commune sacrifices individual good to the necessities of the people; a feudal order invokes use and wont to restrict avarice to its due; a capitalistic society employs authority to keep business out of predatory activities. It is, however, only with the separation of the individual from the social economy, and with the distinction of the making of money from the production of a living, that the terms private gain and public good appear in clear cut relief. Accordingly the rise of commerce brings the question of the role of acquisition in social organization.

In the Middle Ages an antithesis was set up between private gain and public good. A feudal structure of society, in which each person held the station in life to which God had appointed

him, had little place for profits as a bait to get things done. The trafficking for gain lay upon fringes of a customary industrial system; its unworthy practitioners were beyond the pale of social respectability. It was taught that, since the value of an object was inherent within it, the trader could claim his ungodly reward only by buying at less or selling at more than worth. It was the duty of the Christian, as he would save his immortal soul, to keep himself "unspotted" from "the world" and his heart free from "covetous desire." He was permitted, eventually even encouraged, to provide goods against his own and his neighbor's necessities; but, since money was the root of all evil, the narrow path to heaven's gate was not by the way of affluence. The practise of the acquisitive arts was not unknown within the established system of fief, manor and church; but the structure of society, the judgment of respectability, the dialectic about value, and the Divine Word left to the calling of money making a scant and despicable place in the arrangements of man.

In the wake of industrialism acquisition came into an increased importance and an enhanced repute. The passing of otherworldliness endowed human nature with insatiable wants to be satisfied with material goods; the decline of feudalism and the decay of authority gave greater scope to the individual and invited a less stereotyped social order; the division of labor and the multiplication of goods made inevitable a market for their exchange and a pecuniary calculus for the measurement of their values. To the individual, profit or loss came to be "the beacon" which invited an increase or compelled decrease in production. A growth or decline in personal income, success or failure in business, was a blessing or a curse that came by way of the market. Thus acquisition came to connect individual productive effort with the maintenance of "the great industry."

In time popular thought made its customary accommodation to the changed role of money making in social organization. A trade, bad in itself or if pursued for gain, was to be allowed if its goods were used to relieve necessity. The danger to the public was not very imminent; a man knew what he wanted; the buyer was protected by the keenness of the rivalry between traders. Nor was it easy to fix the limits of tolerance; however harmful luxuries might be, their production made employment for persons who might otherwise become public charges.

Besides, the rich man could eat and wear little more than another; his surplus wealth he must invest in productive industry. In short, as Alice in Wonderland put it, it is "each person minding his own business" that "makes the world go round." In time ends and checks dropped out of the picture, and acquisition came to be of value in itself. A man has "a right" to "pursue an honest calling in an upright way" and to "do what he will with his own." The taboo upon avarice gave way to tolerance, and tolerance to rightful acceptance; thus was one of the seven deadly sins transformed into a cardinal virtue.

The philosophers converted this crude justification of acquisition into an articulate system. Its basis was the discovery of an inevitable connection between the expression of an individual instinct and the fulfilment of a social purpose. Cicero was quoted: "Bees do not congregate for the construction of the honeycomb; but, being by nature gregarious animals, combine their labor in the comb." Blackstone discovered as a foundation for law that "the Creator . . . has been pleased so to contrive the constitution and frame of humanity that we should want no other prompter to enquire after . . . but only our self-love, that universal principle of action." The deists translated "the Creator" into "Nature" and won for "the inseparable connection of justice with the happiness of each person" the status of immutable law. Hume came upon the great truth that the individual in seeking his true and substantial good promotes the larger purpose without being aware of what he is about. Adam Smith held that while the trader, "by directing . . . industry in such a manner as its produce may be of the greatest value . . . intends only his own gain, he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention," and condemned merchants "who affected to trade for the public good." With this lead the scholars translated "self-love" into "profit-seeking," created an "economic man" motivated by a "felicity calculus," made of the laws of supply and demand "economic harmonies," and obtained from the limited resources of society "the economic maximum" of goods. Acquisition thus became "the driving force" of an automatic, self-regulating and beneficent industrial order.

A repute so high was not to be retained even in a capitalistic society. The dominance of self-

interest as a motive and the pecuniary form of its expression have alike been challenged. The love of gain is only one of the incentives to action; it must take its chances along with the thirst for fame, the demand for the regard of one's fellows, the motive of service, idle curiosity and the urge toward self-expression. The pecuniary incentive varies from group to group; its hold is greater upon the promoter than upon the manufacturer, the merchant than the physician, the adventurer than the established man of business. Its compulsion is not uniform even upon members of a trade; there are degrees of mercy even among money lenders. The lure is not in gain, but in the unlike and incommensurable things money will buy; vendible things must compete with pleasures that money cannot purchase. Ofttimes activity has its source not in a demand for money but in the zest for a game in which money is the symbol and the token of success: "the man who plays cards for cowries is not mastered by a desire for cowries." Man is not "a lightning calculator of pleasures and pains who oscillates like a homogeneous globule of desire under the influence of 'pecuniary' stimuli." Activity is an expression of a working scheme of habits; acquisition is compelling or not as it is embodied in the customary ways of everyday life. These various lines of criticism, without denying to acquisition a power over the activities of men, take away its exclusiveness as an incentive, hedge it about with limits, and make it inadequate as a key to the organization of industry.

A challenge has likewise been leveled at the capacity of acquisition to direct industrial activity. The elemental urge of self-interest is aimless and untamed; it may be impelled in many directions, but can impel itself in none. It is the institutional system within which it is spent that gives its character and imparts form to its results. The Arabian sheik preying upon his neighbors, the monk parading his humility, the general seeking glory, the merchant counting up his gains, the social worker doing good, may all be personally acquisitive; yet acquisition does not explain their respective activities. The slave owner and the industrial employer may have a like devotion to personal gain; yet it is not acquisition, but the legal status of the laborer which impels the former to conserve his investment in human chattels and the latter to exact as much wear and tear as he can for the daily wage. It is not a smaller regard for profits, but a larger appreciation of long-time

values, which makes the corporation of today more considerate of laborers and customers, and more concerned with long-time planning, than it was a generation ago. If currently acquisition leads to the production of goods for sale, rather than to the robbery of neighbors or the laying up of treasures in heaven, it may be because of the compulsion which lurks in the prevailing order of society. If today money making is the dominant activity, it is not of necessity because man is actuated by pecuniary motives; it may well be because the conventions of society as now organized impel his activities toward pecuniary ends. Always and everywhere values, institutions and arrangements such as these compromise the acquisitive motive, confine it within channels, and direct it toward objectives. Its character, its uses, its effects are what they are because of the rules of the game under which we acquire.

Nor has criticism stopped with limiting acquisition to this more modest role in social organization. The neo-canonists, standing in the direct line of ecclesiastical tradition, adapt the older condemnation of avaricious individuals to the newer commercial economy. They discover a subordination of great industries to the ends of private gain, a welter of unearned incomes rooted in privilege and property, and a failure of society consciously to provide for the larger needs of its members. They denounce modern industrialism as an "acquisitive society" and demand in its stead a "functional society." The proponents of the existing order retort that business is a scheme of arrangements for producing goods "to satisfy wants"; income is contingent upon the performance of service, a person gets what he produces and must produce what he gets; and capitalism is a "functional society." The words "acquisitive" and "functional" are used with ease and defined with difficulty. A mediaeval chronicler writes: "The House of God is tripartite: some work, some fight, and some pray"; a modern expositor insists: "Economic society is composed of four groups: some work, some save, some provide land, and some undertake the risks of enterprise." An initial commitment and a selection of detail may indifferently make of an industrial order a functional or an acquisitive society. The exchange of arguments results in the statement rather than the answering of the questions: What are the functions needful to be performed and what is the scheme of control that gives greatest promise of performance?

The question of the role of acquisition in human affairs is not yet resolved. At present some hold that desire for money is rooted in a "human nature" which "cannot be changed"; they are confident that in the long run acquisition must be a means to social welfare, and would let matters alone. Others make selfish activity an expression of antisocial habits; they would have the individual charge his conscience with his duty to his fellow men, make of business a profession with its higher ethical code, and replace the urge toward gain with the spirit of service. Still others find self-love a useful human possession, neither good nor bad in itself; they would so make over the values, arrangements and usages of society that individuals in pursuing their own interests are impelled in the way of general welfare. Thus in programs aiming alike at the larger good, acquisition is to be left alone, suppressed, and directed. Amid the uncertain and changing values of life private gain and public good bid fair to present an abiding issue.

WALTON H. HAMILTON

See: ACCUMULATION; ECONOMIC ORGANIZATION; BUSINESS; CAPITALISM; COMMERCIALISM; INDUSTRIALISM; ECONOMIC INCENTIVES; HUMAN NATURE; UTILITARIANISM; USURY.

Consult: Cooley, C. H., *Human Nature and the Social Order* (2nd ed. New York 1922); Leslie, T. E. Cliffe, "The Love of Money" in *Essays in Political and Moral Philosophy* (Dublin 1879) p. 1-8; Slichter, S. H., "The Organization and Control of Economic Activity" in *The Trend of Economics*, ed. by R. G. Tugwell (New York 1924); Sumner, W. G., and Keller, A. G., *The Science of Society*, 4 vols. (New Haven 1927) vol. iii, p. 2059-159; Tawney, R. H., *The Acquisitive Society* (New York 1921); Whately, R., *Introductory Lectures in Political Economy* (4th ed. London 1855) p. 58-69; Wicksteed, P. H., *The Common Sense of Political Economy* (London 1910) p. 13-211.

ACSADY, IGNAC (1845-1906), Hungarian historian and publicist. He was educated at Debreczin and Budapest, and in 1869 began his journalistic career as a contributor to the liberal political daily, *Századunk*; later he became a regular contributor to the *Pesti Napló*. With Charles Tagányi, Acsády was the founder of the modern school of Hungarian economic history. He made use of a great mass of unpublished archive material and was one of the first of the Hungarian historians to adopt the methods of the German *Kulturgeschichte*, a trend predominant in the last half of the nineteenth century. He specialized in the history of the sixteenth, seventeenth and eighteenth

centuries, dealing at length with the history of economic classes, of state finances and with population problems of Hungary. His essays on the history of financial administration are of particular merit and are especially brilliant in the treatment of the Hapsburgs.

JULIUS SZEKFÜ

Important works: *Magyarország Pénzügyei I. Ferdinánd uralkodása alatt* (The Financial Situation of Hungary under Ferdinand I) (Budapest 1888); *Közgazdasági állapotaink a XVI. és XVII. században* (The Economic Situation of Hungary in the 16th and 17th Centuries) (Budapest 1889); *Magyarország népessége a pragmática sanctio korában* (The Population of Hungary at the Time of the Pragmatic Sanction) (Budapest 1896); *A magyar jobbágyság története* (The History of the Hungarian System of Serfdom) (Budapest 1896); *Magyarország történetét I. Lipót és I. József Korában (1657-1711)* (The Age of Leopold I and Joseph I) (Budapest 1898); *A magyar birodalom története* (History of the Hungarian Nation) (Budapest 1904); *Zsidó és nem zsidó Magyarok az Emancipáció után* (Jewish and Non-Jewish Magyars after the Emancipation) (Budapest 1883).

ACTION FRANCAISE, a French political group, highly critical of democracy and republicanism and striving for the restoration of monarchy and the intensification of nationalism. It has grown out of the Ligue de la Patrie Française, a committee formed in 1898, in the midst of popular excitement about the celebrated Dreyfus case, by persons of conservative and militarist tendency who were violently anti-Dreyfusard. In 1899 Henry Vaugois, the leader in this movement, began the publication of the *Action française*, first as a weekly and after 1908 as a daily. Under the influence of its prominent intellectual leader, Charles Maurras, who joined Vaugois, and with the special financial backing of a large legacy from the widow of Marshal MacMahon, it gained the adherence of most French royalists, traditionalists and other ultra-conservatives, chiefly Catholic in religion, until it has become the outstanding expression of reaction in France. The central organization supports a number of dependent propagandist societies, as well as publications, for city and countryside, for students and professional men; the interesting "Camelots du Roi" are a body of young men who police the meetings and lead the street demonstrations of the Action Française.

The popular influence of the group is difficult to estimate. Its direct influence on French politics is certainly slight; not a single professed member of the organization now occupies a seat in the French Parliament, and only one

(Léon Daudet) occupied such a seat from 1919 to 1924. Indirectly, however, its influence is considerable. Not only have young persons, particularly university students, been attracted to it in increasing numbers, but many of its nationalist activities have been acclaimed by journalists and politicians who profess abhorrence of its royalist principles. On the other hand the organization has suffered internal schisms as well as external setbacks. Two of its leaders, Louis Dimier and Georges Valois, have left it as a result of internal dissensions, the former in 1920 and the latter in 1925. More recently, moreover, the Catholic church has officially opposed it.

The organization has catered to Catholics by denouncing the "anticlerical" legislation of the French Republic, and it is estimated that at least three quarters of its enrolled members have been Catholics, including many priests. Its chief director, Charles Maurras, is, however, a positivist and an agnostic and has expressed anti-Christian opinions in some of his books. This fact has recently been seized upon by the ecclesiastical authorities as justification for their condemnation of a movement which must have appeared to them as alienating republican Frenchmen from the church. On August 27, 1926, Cardinal Andrieu, Archbishop of Bordeaux, publicly condemned many of the teachings of the Action Française and counseled Catholics to withdraw from it, and his action was endorsed by Pope Pius XI on September 7, 1926; on December 29, the pope went further, forbidding Catholics to belong to it or habitually to read its literature. Almost the entire hierarchy of the Catholic church in France, by a circular letter of March 10, 1928, recorded their support of the papal position, while emphasizing its moral, rather than political, implications. Since then new dissensions have existed among French Catholics, between those who have obeyed the pope and those who have disobeyed him.

The doctrine of the Action Française is essentially that of Charles Maurras and represents a curious admixture of the positivism of Comte, the traditionalism of DeBonald and the *élan vital* of Bergson. It is summarized in three formulae: integral nationalism, practical empiricism and the forceful blow. "Integral nationalism" means that "a national policy should be pursued, involving the multiplication and strengthening of institutions which benefit the greatest possible number of living organisms

by maintaining national integrity and fostering the growth of national power (for a nation declines when it ceases to grow in power)." By "practical empiricism" is meant primarily the teaching that "order in society, no matter how it is obtained, is more important than the liberty of the individual." Concerning the "forceful blow," it is declared "that the supplanting of the republic by the monarchy (a condition necessary for the salvation of the country) will probably not be realized (unless extraordinary events occur) by the ballot, but rather that the existing government will be overthrown, like most preceding governments, by force; and that the preparation and organization of the needful *coup de force*, as well as the creation and diffusion of a state of mind which would assure success to the use of force, are essential and necessary elements of the program of the Action Française." The doctrine, as a whole or in its parts, seems to have elicited the sympathy of such different intellectual types as Maurice Barrès and Georges Sorel and has undoubtedly affected the thought of the younger generation in contemporary France, far beyond the enrolled membership of the organization. In particular the criticisms which it has leveled against individualism and democracy have been incisive and have contributed to the existence in France of an impatience with parliamentary republicanism akin to, though admittedly less influential than, that engendered by Fascism in Italy or by Sovietism in Russia.

The Action Française recognizes the Duke of Guise, the heir of the Bourbon and Orleanist families, as rightful king of France, and demands the restoration of the old monarchy with its supposedly traditional institutions and policies. The most important of these are regionalism, that is, local decentralization and some provincial autonomy within the country; a privileged position for the church and for the "syndicates" of social classes and economic groups; the substitution of a kind of syndicalism and functional representation for existing individualism and political democracy. The organization is militantly nationalist. Its tirades against Germany and its criticisms of the League of Nations are incessant. It preaches the necessity not only of adequate French security, but also of forceful French expansion in Europe and overseas. It perpetually accuses the French Republic of cowardice, if not of treason; and, since its condemnation by the pope, it has directed especially venomous attacks against what

it terms the pacifist pro-German and anti-French alliance of the papacy with the republican government of France.

CARLTON J. H. HAYES

See: NATIONALISM; MONARCHY; SYNDICALISM; DIRECT ACTION; FORCE; BOLSHEVISM; FASCISM; REPRESENTATIVE GOVERNMENT; AUTHORITY; CHURCH; ANTICLERICALISM.

Consult: Platz, Hermann, *Geistige Kämpfe im modernen Frankreich* (Munich 1922); Hayes, Carlton J. H., *France: A Nation of Patriots* (New York 1929) ch. viii; Roux, Marie de, *Charles Maurras et le nationalisme de l'action française* (Paris 1927); Jones, Percy M., "Intellectual Reaction in France" in *Hibbert Journal*, vol. xxv (1926-27) 159-71; Gwynn, Denis R., *The "Action Française" Condemnation* (London 1928); Maurras, Charles, *Enquête sur la monarchie, suivi de Une campagne royaliste au "Figaro," et Si le coup de force est possible* (Paris 1927), and *Les pièces d'un procès. L' "Action française" et le Vatican* (Paris 1927); *Almanach de l'action française* (annual) (1923-); *Cours de l'Institut d'action française* (quarterly) (1923-).

ACTIONS, LEGAL. See REMEDIES, LEGAL; PROCEDURE, LEGAL.

ACTON, JOHN EMERICH EDWARD DALBERG, EIGHTH BARONET AND FIRST BARON (1834-1902), English historian. His education was remarkably cosmopolitan. As a boy he went to school in Paris; for five years he studied at the Catholic College of Oscott, in England, presided over by Dr. (later Cardinal) Wiseman; next he was tutored at Edinburgh by Dr. Logan; and thereafter for six years he resided at Munich as the guest, pupil and friend of the famous German historian Döllinger. He visited the United States in 1855, Russia in 1856, and Italy, in company with Döllinger, in 1857. To Döllinger's influence may be attributed Acton's subsequent devotion to scholarly erudition and to "scientific" history, to the ideal of exact and full truthfulness in historical investigation and writing. This ideal, together with a mastery of detail and a cosmopolitanism which made him master of many languages and at home in several countries, rendered Acton one of the outstanding scholars of his age. His amazing scholarship, moreover, he applied to causes which were always dear to him and which nicely reflected the spirit of the age; he was stalwartly liberal in politics, economics and religion; a foe of bigotry and persecution; an enemy of nationalism; and, although a practising Catholic to the day of his death, a severe critic of many papal policies.

In 1859 Acton settled definitely in England

and for the next six years was a member of Parliament for an Irish constituency, voting with the Liberals and forming a close friendship with Gladstone, but taking little part in the debates. In the meantime he began to sponsor and write a great deal for a series of Catholic reviews by means of which he hoped to promote critical scholarship among his co-religionists. The extreme liberalism of these journals, however, gave repeated offense to ecclesiastical authorities and led to the discontinuance of one after another: *The Rambler* (1859-62); *The Home and Foreign Review* (1862-64); *The Chronicle* (1867-68); and *The North British Review* (1868-71). Acton was bitterly hostile to Pope Pius IX's Syllabus of Errors of 1864, and in 1869-70 he zealously opposed the projected definition of the dogma of papal infallibility by the Vatican Council. It was on Gladstone's nomination that Acton was raised to the peerage in 1869, but he later took issue with Gladstone's interpretation of the decrees of the Vatican Council and in 1875 expressed his concurrence with Newman's views of papal infallibility. That closed the polemical period of Acton's career.

Acton helped to establish the *English Historical Review* in 1886. In 1895, on the nomination of Lord Rosebery, he was appointed Regius Professor of Modern History at Cambridge in succession to Sir John Seeley. During 1899-1900 he projected the *Cambridge Modern History* in twelve volumes, the first of a very noteworthy series of cooperative surveys of world history, written by acknowledged historical specialists of various countries, and he lived to see most of the first volume and half of the second in type. Acton himself never wrote a book. He gathered a good deal of material for monumental works on the history of freedom and on the French Revolution, but his absorption in detail and his lack of requisite organizing ability prevented him from bringing any of his larger plans to fruition. High historical ideals, a leading part in the dissemination of German methods of scientific history in England, and a few valuable essays and suggestive fragments which have been collected since his death in volumes mentioned below, were the legacy which Lord Acton bequeathed to contemporary social science.

CARLTON J. H. HAYES

Important works: COLLECTED LECTURES, ESSAYS AND FRAGMENTS: *Lectures on Modern History* (London 1906); *Historical Essays and Studies* (London 1907); *History of Freedom and Other Essays* (London 1907);

Lectures on the French Revolution (London 1910); *Lecture on the Study of History* (London 1896).

CORRESPONDENCE: *Selections from the Correspondence of the first Lord Acton*, ed. by J. N. Figgis and R. V. Lawrence, vol. i— (London 1917—) correspondence with Cardinal Newman, W. E. Gladstone, Lady Blennerhassett, etc.; *Letters of Lord Acton to Mary, Daughter of the Right Hon. W. E. Gladstone*, ed. by Herbert Paul (London 1913); *Lord Acton and his Circle*, ed. by Cardinal Gasquet (London 1906).

Consult: Shaw, W. A., *Bibliography of the Historical Works of Dr. Creighton . . . Dr. Stubbs . . . Dr. S. R. Gardiner and the late Lord Acton* (London 1903); Fisher, Herbert, *Studies in History and Politics* (Oxford 1920) p. 86–112.

ACTS OF TRADE, BRITISH. This term is used in a historical sense to designate certain statutes of the English Parliament, chiefly in the seventeenth century, passed in the interest of shipping, mariners and trade. As commerce began to expand during the last days of Elizabeth's reign and the early years of the reign of James I, and as colonization became significant in the period before the Civil Wars, rules were laid down, characteristic of all the maritime states of Europe at the time, for the control of trade and the plantations. England had already defined her position in regard to the carrying trade in certain experimental and temporary statutes of Richard II, Henry VII and Elizabeth, whereby certain valued commodities were to be imported into England from the continent in English ships manned for the most part by English sailors. Moreover, in 1621, after the settlement of Virginia and Bermuda, the Privy Council extended the rule by ordaining that plantation commodities—in this instance tobacco—should be "appropriated unto his Majesty's subjects and not communicated to foreign countries but by way of trade and commerce and from hence only," inasmuch as they were English colonies and it was the custom of all colonizing countries to keep their plantation trade to themselves.

After the decade 1630–40, when the Dutch had succeeded in obtaining almost complete control of the carrying trade of the world, the Rump Parliament, partly in a spirit of retaliation and partly for the purpose of managing England's trade to her best advantage, in 1651 passed an ordinance of the Commonwealth commonly known as the first navigation act. By this ordinance all plantation commodities of Asia, Africa and America and all goods of the growth and manufacture of Europe were to be imported into England, Ireland, Wales,

Berwick-upon-Tweed and other English possessions only in ships owned, commanded and manned by English subjects of the Commonwealth or, in the case of European goods, in such ships as belonged to the people of the country whence the cargo came or where it was produced or to people resident in the port of first shipment. This act, which was clearly designed to injure the Dutch carrying trade, was probably passed at the instigation of a few interested London merchants belonging to the East India and Levant Companies. It did little to impair the dominance of the Dutch in the commercial world, for they were almost as powerful in 1675 as they had been in 1650, and it undoubtedly hurt rather than helped England's trade as a whole.

Owing to the maladministration of the finances under the Commonwealth and the Protectorate, England in 1660 was on the verge of bankruptcy, with a debt estimated at £3,000,000—more than double the largest recorded crown liability before 1641. Trade was depressed and the merchants were filled with foreboding. On the restoration of Charles II the revival of trade became a matter of first importance to the king and Lord Chancellor Hyde (afterwards the Earl of Clarendon) as well as to both merchants and officials. Before the end of the year a council of trade and a council for foreign plantations were set up, and on September 17 the Convention Parliament passed an act—confirmed by the regular Parliament the next year—for the encouragement and increase of shipping and navigation. In its first seventeen clauses this act repeated the essential features of the ordinance of 1651 (which ceased to have validity on the return of the monarchy), differing from it only in one or two particulars. It removed all restraints upon the trade with continental Europe, except Russia and Turkey, but required that all plantation commodities brought into England be brought only in English built ships (foreign built ships were debarred by an act passed the next year), owned by Englishmen and properly certificated and registered, of which the masters and three fourths of the seamen should be English subjects. The Channel Islands, Scotland, construed as a stranger kingdom until 1707, and Ireland by a later act of 1671 were denied the privileges of this act. Its language, as well as that of subsequent acts, was so poorly chosen that many difficulties arose in the attempts that were made at enforcement. In some

cases decisions were not reached throughout the eighteenth century, and customs officials, both in England and the plantations were often perplexed as to what to do. They generally construed the acts as literally as possible, and in some cases of doubt threw the ultimate decision upon the treasury, the commissioners of the customs and the law officers of the crown.

The eighteenth clause of the act of 1660 revived a regulation that does not appear to have been enforced under the Puritan administration—the requirement that certain plantation commodities be brought to England only. The order in council of 1621 had required that "all tobacco and other commodities whatsoever" should be brought directly to England; the act of 1660 was not so sweeping, enumerating only sugar, tobacco, cotton-wool, indigo, ginger and such dyewoods of plantation growth as fustic, brazilletto and logwood. In the following century the list was extended to include many other commodities that England wanted and valued, partly for promoting her shipping and manufactures, as in the case of naval stores, iron, copper and lumber, partly for purposes of revenue, as in the case of rice, and partly to injure France, as in the case of beaver and other furs and also of molasses. After 1764 the list was still further extended, and finally concerned the northern colonies as well as those of the south and the West Indies. In 1730 and 1735 rice, and in 1739 sugar, were in part relieved of the restraint, and eventually rice was allowed to be shipped to any point in Europe, Africa and America south of Cape Finisterre. It was always a debatable point whether coconuts, logwood from Honduras and Canary wines were enumerated or not. The customs officials said that they were; the law officers were inclined to think that they were not.

After the act of 1660 had been in operation for ten years it was discovered that the colonists were evading it in one important particular. Since enumerated commodities could be carried from one plantation to another, for the benefit of the colonists, New Englanders and New Yorkers thought staples thus carried and not consumed in the plantations had fulfilled the law and could be reshipped to Europe. This practise, which broke through the intended channel of trade and led to the diminution of the English customs revenue, called for further legislation. An act was passed in 1673 which contained a clause declaring that all vessels arriving at the plantations and intending

to take on a cargo of enumerated commodities should pay a duty at the colonial port of clearance, unless their captains could show the governor (or later the naval officer or the royal collector) a certificate that they had given bond in England to carry their lading directly back to the mother country. This payment, which came to be known as the "plantation duty," was a penny a pound on tobacco and other sums for other enumerated commodities. Even if the captain paid the duty he was still obliged to deposit a bond with the governor, naval officer or collector, binding himself, if he did not unload the goods at another colonial port, to take them directly to England, where he would still have to pay in addition the usual customs duty.

Thus far the acts regulated the plantation trade in only one direction, that toward England. In 1663 an act was passed regulating the trade the other way, that is, from Europe to America, by requiring that all foreign goods wanted by the colonists must first enter at an English port and thence be shipped to America as if they were English goods. The idea was to make the realm—that is, England, Wales and Berwick-upon-Tweed—the center, staple and magazine of all commodities exported from or imported into the plantations. The purpose of the act was to augment the revenue and the carrying trade and also to maintain a better correspondence with the king's subjects across the sea, to keep them in a closer dependence on the mother country and to render them more beneficial and advantageous to her, objects frequently mentioned in the acts.

Owing to the many ambiguities found in these acts and to the fact that they were continually violated in the years before the Revolution of 1689, despite strenuous efforts on the part of the treasury and the commissioners of the customs to see that they were enforced, a final act was passed in 1696 as part of a general attempt of the government to make the whole system more rigid. Although this act made a number of important changes in phraseology and introduced many new details in matters of administration, it did not alter in any essential particular the rules laid down by the acts of 1660, 1663 and 1673. It increased the number of ambiguities, extended considerably the machinery of operation, provided for vice-admiralty courts, and granted greater powers to the customs officers in the colonies. A number of explanatory and supplementary acts were passed in the

eighteenth century, the most important of which was the Molasses Act of 1733, which vainly attempted to regulate the trade between the British northern colonies and the French and other foreign colonies in the West Indies. But no acts, proclamations or orders in council, of date later than 1663, changed in any way the fundamental principles upon which the navigation acts were based.

The objects of the acts were to increase England's shipping and to create for her an advantageous trade. An advantageous trade was one which encouraged navigation and added to the number of England's seamen; which exported England's products and manufactures and imported those raw materials that England needed either for consumption or to use in her industries or for the fitting out of her ships engaged in domestic and foreign trade; and which created a general balance of exports over imports in England's favor. The ultimate object was to render the realm the chief beneficiary of all commercial operations in which the British world was engaged. To this end the welfare of Scotland, until 1707, Ireland and the plantations was sacrificed in the interest of the leading partner, for the conviction was firmly held that an independent trade for any of the subordinate members would be injurious to the trade of the realm and would violate wholly the purposes for which such dependents existed. Of all the plantations settled by the English, Ireland was considered most inimical to England's prosperity and in the long run suffered more from the navigation and other acts than did either the Channel Islands or the American plantations. For her treatment of Ireland England was to suffer a heavy reckoning in the nineteenth and twentieth centuries.

In the American colonies the effects of the acts of trade were less conspicuous. Although the acts were restrictive, in the sense that they confined trade to English and colonial bottoms and endeavored to direct and protect the channels through which the plantation trade was to flow, it may be doubted whether they ever were a serious menace to colonial development. That inconvenience and loss were caused in many instances is doubtless true; but in time the colonists adjusted themselves to the conditions, and in the eighteenth century had largely ceased to find fault, except perhaps in the British West Indies, where the acts were a greater hardship than on the continent. But even there other causes must be assigned for the general decline.

Where the acts manifestly worked an injury they were moderated, as in the case of rice and sugar and of the Greenland fishery and the Baltic trade; or they were successfully evaded, as in the case of the Molasses Act; or they were neutralized by smuggling and by the connivance of customs officials in America. The attempts to interfere with colonial freedom of commerce were much less significant in causing the revolt of the colonies than were the attempts of the British authorities to interfere with colonial legislation and the exercise of colonial self-government. In this respect the causes of the revolution were political rather than commercial.

How far the acts of trade were of advantage to England herself will always be a matter of speculation. Contemporary writers were not agreed as to their merits and many were strongly opposed to them, believing that they seriously injured England's own freedom of commercial action. Others, particularly of a later date, called them England's "Magna Charta Maritima" and "Commercial Palladium," and attributed her naval supremacy and commercial leadership to their influence. After 1783 the general situation was so far changed as to require their frequent suspension and they were greatly modified under Huskisson's influence in 1822 and 1823. The last navigation act was passed in 1845 and the final repeal took place four years later. England lost in consequence nothing of her naval importance or commercial prosperity, and there is reason to believe that the beneficial effects of the acts of trade upon England's own growth and expansion have been unduly exaggerated.

CHARLES M. ANDREWS

See: COLONIAL SYSTEM; MERCANTILISM; COLONIES; COMMERCIAL POLICY; MERCHANT MARINE.

Consult: Smith, Adam, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Cannan ed., 2 vols. (London 1904) vol. ii, p. 96-115, 427-29; McCulloch, J. R., "Navigation Laws" in his edition of Adam Smith, *Wealth of Nations* (Edinburgh 1855) p. 534-42; Macpherson, David, *Annals of Commerce*, 4 vols. (London 1805); Reeves, John, *History of the Law of Shipping and Navigation* (Dublin 1792); Allen, Joseph, *The Navigation Laws of Great Britain* (London 1849); Osgood, H. L., *American Colonies in the Seventeenth Century*, 3 vols. (New York 1907) vol. iii, and *American Colonies in the Eighteenth Century*, 4 vols. (New York 1924) vol. i, chs. iv-vi; Beer, G. L., *Origins of the British Colonial System, 1578-1660* (New York 1908), and *The Old Colonial System, 1660-1688*, 2 vols. (New York 1912); Root, W. T., *Relations of Pennsylvania with the British Government* (New York 1912); Pitman, F. W., *The Development of the*

British West Indies (New Haven 1917); Ashley, W. J., "The Tory Origin of Free Trade Policy" and "England and America, 1660-1760" in *Surveys, Historic and Economic* (London 1900) p. 268-360; Clarke, G. N., "Acts of Trade" in *History*, n. s., vol. vii (1822-23) 282-86; Andrews, Charles M., "The Acts of Trade" in *Cambridge History of the British Empire*, vol. i- (New York 1929-) vol. i, ch. ix.

ACTUARIAL SCIENCE. See LIFE INSURANCE.

ACWORTH, WILLIAM MITCHELL (1850-1925), railway economist. He was graduated from Oxford in history and for a time served as English tutor to the ex-Kaiser and his brother. Later he became a master at Dulwich College, but in 1885 he gave up scholastic life. He was chairman of the Metropolitan Asylums Board and a member of the London County Council, and in 1890 was called to the bar. Railways became his paramount interest. *The Railways of England* (London 1889) and *The Railways of Scotland* (London 1890) led to a visit to America for the study of American railroad practise, of which he ever remained an admirer. In *The Railways and the Traders* (London 1891) he attacked the secrecy of British railway accounts, and fearlessly continued the fight until ton and passenger-mile statistics were achieved (1920). His lectures for railway students were embodied in his *Elements of Railway Economics* (Oxford 1905, revised Oxford 1924), which launched that subject in England. As a member of the Royal Commission on Accidents to Railway Servants (1899), the Vice-Regal Commission on Irish Railways, the Board of Trade Committee on Railway Accounts and Statistics (1906) and as a barrister at the parliamentary bar specializing in railway work, he amassed an unequalled knowledge of railway history and practise. Impartiality and sound judgment enabled him later to make much use of this knowledge.

Criticism of British methods alienated British railwaymen, but his reputation as a railway expert grew elsewhere. After 1915 his main work was abroad. His evidence before the Newlands Committee of Congress (1917) formed the basis for *An Historical Sketch of State Railway Ownership* (London 1920). Although he was opposed to the principle of state ownership he recognized its occasional use. As one of a commission of three he was largely responsible for the Canadian National system. His reports upon the railways of southern Rhodesia (Salisbury 1918), India (London 1921), Austria, undertaken for the League of

Nations (Geneva 1923) and Germany, for the Reparations Commission (London 1924), materially affected social and industrial progress in those countries. He was a member of the Railway Rates Advisory Committee (1919-20). On his deathbed he was arranging details of an inquiry into the railways of Rumania. Acworth's great contribution to society was the instigation of a new relationship between a nation and its railways, by which he endeavored, successfully, to coordinate the benefits of government and private ownership.

CHARLES ELY ROSE SHERRINGTON

Consult: Stephenson, W. T., "Sir William Acworth" in *Economic Journal*, vol. xxxv (1925) 327-29; Paish, G., "Sir William Mitchell Acworth" in *Journal of the Royal Statistical Society*, n. s., vol. lxxxviii (1925) 467-70.

ADAMS, BROOKS (1848-1927), social theorist, brother of Henry Adams, undertook to extend to social processes the physical principle of the dissipation of energy. In *The Law of Civilization and Decay* (London 1895; 2nd ed. New York 1897) he held that societies dissipate their energies in movement and centralize as they accelerate. In *The New Empire* (New York 1903) he attempted to discover the laws of consolidation and dissolution of those administrative masses called empires, holding that the economic center of the world determines the social equilibrium, and that this international center of exchange is an ambulatory spot on the earth's surface, which shifts back and forth as discoveries in applied science and geography change avenues of communication and cause trade routes to converge. Adams wrote in *The Theory of Social Revolutions* (New York 1913) that consolidation implies equivalent capacity for administration, but since adaptation to changing demands of the environment is beyond an established type of mind, new governing classes arise until the limit of the administrative capacity of the race is reached, and disintegration begins. The rise of a new governing class is always synonymous with a social revolution and the redistribution of property. In his introduction to Henry Adams' *The Degradation of the Democratic Dogma* (New York 1919) he likened modern democracy, with its infinite mass of conflicting minds and interests, to a vapor which loses in collective intellectual energy in proportion to its expansion. Brooks Adams had great vigor of thought and expression, but probably his chief contribution

was in stimulating his brother Henry's speculations on a science of history.

HAROLD D. LASSWELL

ADAMS, CHARLES FRANCIS (1807-86), American diplomat and statesman. In 1840 he began his inevitable political career as Whig member of the Massachusetts legislature. He was essentially the balanced, moderate, instructed statesman, and slavery moved him, not to abolitionism, but into the ranks of the "Conscience Whigs." In 1848 he was nominated for the vice presidency by the Free Soilers. In 1859 he was elected to Congress by the Republicans.

His flawless record as minister to Great Britain during the Civil War constitutes his claim to fame. He did not, perhaps, embody the qualities of a constructive diplomat, but he knew his trade, and he represented the United States with a bold and honorable mien which won increasingly the respect of the British. The details of his mission are national history.

Returning to the United States in 1868, he declined the presidency of Harvard and escaped that of the United States. The chief Liberal Republican leaders were anxious to name him to run against Grant in 1872, and the Democrats were willing to endorse him. The convention, however, was stampeded for Horace Greeley, whose overwhelming electoral defeat is slight indication of how Adams might have run. During these uncertainties Adams was performing the most important service of his life. As United States arbitrator for the Geneva arbitration, he devised a method of disposing of the hopeless American claims for indirect damages, which saved the arbitration and its subsequent prestige.

CARL RUSSELL FISH

Important works: *Life of John Adams*, 2 vols. (Philadelphia 1871); an introductory "Memoir" to Adams, Abigail, *Letters*, 2 vols. (2nd ed. Boston 1840) vol. i, p. xiii-xxxvi. He edited his father's *Memoirs*, 12 vols. (Philadelphia 1874-77), and a number of his letters are reprinted in *A Cycle of Adams Letters, 1861-1865*, ed. by W. C. Ford, 2 vols. (Boston 1920).

Consult: Adams, Charles Francis, Jr., *Charles Francis Adams* (Boston 1908); a compendious life is in preparation.

ADAMS, CHARLES FRANCIS (1835-1915), American economist and historian, brother of Henry Adams. After thirty-six years of rather casual existence he centered his attention on the study of railroad questions. Partly by way of providing a congenial place for himself in the life of his day he advocated the creation of the

Massachusetts Board of Railroad Commissioners, of which he was a member for ten years from its inception (1869). President of the Union Pacific from 1884 to 1890, he continued for many years to head the Kansas City Stockyards Company, and speculated to advantage in Kansas City real estate. He recorded convictions on a variety of governmental and educational problems.

In general a believer in the efficacy of competition as a regulator of industry, with respect to railroads Adams early pointed out that it resulted in instability of rates at common points and extortion elsewhere. He was reluctant to accept government regulation as an alternative, underestimating, perhaps, its administrative possibilities. The effectiveness of the partial public ownership which he proposed instead—as a means of diffusing standard practises—has remained problematical. An Easterner of property, with Western interests of the kind noted, he indignantly defended judicial review of state rate-making. "Bad manners" and local discrimination, he thought, had brought down upon the railroad companies the blame for conditions attributable to "protection and paper money" or to the carelessness of settlement in the West.

The historical work of Adams was to some extent directed by his public and ancestral connection with Quincy, Mass., and by the service of his father as minister to England during the Civil War. His New England studies rest upon a general understanding of the period and a critical sense of cultural values. They exhibit an interest not merely in political development but in social relations, manners and modes of life. The investigations in diplomacy dramatically visualize the uncertain pendency of events. An essay on "The Era of Change" is a brilliant speculative example of economic determinism.

Adams was a diverting analyst of railroad finance in the buccaneering period. A flexible sense of humor and a forceful epigrammatic style mark his writings.

THOR HULTGREN

Important works: *Chapters of Erie and Other Essays*, with his brother (Boston 1871); *Railroads, Their Origin and Problems* (Boston 1878, revised ed. 1886); *Notes on Railroad Accidents*, lucidly analytical (New York 1879); *Three Episodes of Massachusetts History* (Boston 1892); *Studies, Military and Diplomatic* (New York 1911). Aside from *Charles Francis Adams, an Autobiography* (Boston 1916) there is no substantial account of his life and work.

ADAMS, GEORGE BURTON (1851-1925), American historian. Like other American scholars of the period he received his graduate training in Germany (Ph.D. Leipsic, 1886) where he was especially influenced by the seminar method of Wilhelm Arndt which had been derived through Waitz from Ranke. As occupant of the chair of history at Yale (1898-1917) and as one of the organizers of the *American Historical Review* (1895) he was influential in applying to American scholarship the premises and animus of the German historical discipline.

Adams was probably led into the field of English constitutional history by his early interest in feudalism, shown, for example, in his well known *Civilization during the Middle Ages* (1894). He found the feudal period and the fact of feudalism to have been crucial in the development of the English constitution, and in the working out of that idea lies his creative achievement. He traced the development of English central government from the absolutism of the Norman monarchy to its present democratic results; the central fact in this process was the dominance of law over the king; the point where this dominance was decisively asserted was the Magna Carta in 1215; the vehicle for its assertion lay in the feudal character of that document—its identification of opposition to absolutism with the hallowed traditional forms of a disappearing feudalism.

At other points also Adams contributed to the scholarship of English constitutional history: the early history of Parliament, the splitting off of English and American democracies from the main trunk of the English constitution, the importance of the cabinet system, the effect of monarchic forms upon democratic actualities and the early history of councils and courts.

A dignified, graceful style and a substantial erudition made Adams a respected figure in the scholarly world. For a while he was a little troubled by the encroaching conception of history as a more complex and elusive process than it had been to the school in which he was trained. But in the main he rested in the conviction, expressed in his presidential address to the American Historical Association in 1908, that "history has been determined by forces which act according to fixed law."

MAX LERNER

Important works: *Civilization during the Middle Ages* (New York 1894); *The Growth of the French Nation* (Meadville, Pa. 1896); "Origin and Results of Imperial Federation Movement in England" in State

Historical Society of Wisconsin, *Proceedings*, vol. xlv (1899) 93-116; *Select Documents of English Constitutional History* (with H. Morse Stephens) (New York 1901); "The History of England from the Norman Conquest to the Death of John (1066-1216)" in Hunt, W., and Poole, R. L., *Political History of England*, 12 vols. (London 1906-10) vol. ii; *The Origin of the English Constitution* (New Haven 1912); *The Constitutional History of England* (New York 1921); *Council and Courts in Anglo-Norman England* (New Haven 1926).

ADAMS, HENRY (1838-1918), historian, grandson of John Quincy Adams and third son of the older Charles Francis Adams. He was born in Boston, graduated from Harvard College in 1858, went to Berlin to study civil law, listened to one lecture, spent two years wandering about Germany and Italy, and for want of something better to do became private secretary to his father, who was ambassador to Great Britain during the Civil War. He returned home with the vague intention of entering journalism on behalf of political reform. Disillusioned by the announcement of Grant's cabinet, he accepted an unsolicited appointment as assistant professor of history at Harvard (1870-77), where he imposed upon a few exceptional students a drastic training in historical research, the result of which was a volume of studies (*Essays in Anglo-Saxon Law*, Boston 1876) containing one by Adams himself on "Anglo-Saxon Courts of Law." During the years 1875-76 Adams was also editor of the *North American Review*. After retiring from Harvard Adams resided in Washington but spent much time abroad, especially in Paris, and although counted something of a recluse numbered among his friends and acquaintances many of the most distinguished persons of his generation.

Adams' career falls into two periods. Until about 1895 he was occupied chiefly with the study of American history, although he wrote also *Democracy, An American Novel* (London 1882). Besides special articles, *Historical Essays* (New York 1891), the results of these studies were: *Documents Relating to New England Federalism, 1800-1815* (Boston 1877); *The Life of Albert Gallatin* (Philadelphia 1879); *John Randolph* (New York 1882); *A History of the United States from 1801 to 1817*, in nine volumes (New York 1889-91). In recognition of the high quality of these works, Adams was chosen president of the American Historical Association (1894). The short address which he wrote (but was not present to deliver) for his inau-

guration shows, however, that he had already become skeptical of the value of writing history as he and his colleagues were writing it. During the second period of his life he therefore wrote no more history in the ordinary way, unless one should except the biography written for friendship's sake, *The Life of George Cabot Lodge* (New York 1911). For twenty years he was, on the surface at least, an amused and disillusioned observer of the human scene, engaged in what he ironically called the "search for an education." One may suppose, however, that underneath his sardonic humor Adams was seriously seeking for the significance of his own life and the life of humanity. What troubled him was the fact that a man of his opportunities and ability had been able to accomplish, as he saw it, nothing really memorable or important. The search for an education was therefore an attempt to discover the reason for his failure, to discover the "lines of force" that dominated his age, to discover, in a word, the secret of social evolution, a science or philosophy of history. His later works are largely concerned with this recondite problem: *Mont Saint Michel and Chartres* (p. p. Washington 1904, pub. New York 1913); *The Education of Henry Adams: An Autobiography* (p. p. 1906, pub. Boston 1918) a sequel to the *Mont Saint Michel*; *A Letter to American Teachers of History* (p. p. Washington 1910); *The Degradation of the Democratic Dogma* (New York 1919), which contains the "Letter to American Teachers of History" and "The Rule of Phase Applied to History."

What chiefly troubled Adams was that his own achievements, whether worth while or not, seemed to be the result of accident rather than of purpose; and, so far as he could see, his own life was typical of that of humanity which, conscious of purpose, appeared nevertheless to be driven forward by blind forces which could be neither anticipated nor controlled. Far from solving this problem, Adams never succeeded even in stating it to his own satisfaction. After 1914 he therefore wrote nothing, judging that next to good humor silence was the chief mark of sense. The publication of his privately printed works was contrary to his expressed judgment, but it would be rash to say contrary to his secret desire. Adams will be known chiefly for his *History of the United States*, which is probably one of the ablest works produced by an American historian, and for his *Education of Henry Adams*, undoubtedly one of the most

remarkable autobiographies in the language.

CARL BECKER

Works: The chief sources of information are the writings of Adams mentioned above, especially the *Education of Henry Adams*. In addition should be noted *A Cycle of Adams Letters, 1861-1865*, ed. by W. C. Ford 2 vols. (New York 1920), and *Letters to a Niece and Prayer to the Virgin of Chartres* (with *A Niece's Memories*, by Mabel La Farge) (Boston 1920).

Consult: Taylor, H. O., "The Education of Henry Adams" in *Atlantic Monthly*, vol. cxxii (1918) 484-91; Becker, Carl, "The Education of Henry Adams" in *American Historical Review*, vol. xxiv (1919) 422-34; More, P. E., "Henry Adams" in *Unpopular Review*, vol. x (1918) 255-72.

ADAMS, HENRY CARTER (1851-1921), American economist. His parents, who were of old New England stock, had settled as missionaries in Iowa in 1842. His antecedents and early training pointed to a career in the church, and in 1875 he entered Andover Theological Seminary. He was quickly convinced, however, that "clear thinking is more important than effective exhortation," and began to envisage a life of intellectual activity, with special reference to social and economic science. An opportunity for graduate study presented itself at the newly organized Johns Hopkins University, from which he received one of its first doctorates in 1878. Then followed a brief period at Oxford, Paris, Berlin and Heidelberg for the completion of his formal training, and in 1879 he was initiated into his academic career at Cornell University. In 1886 he was dismissed from Cornell, in direct consequence of a frank expression of his views on the labor problem. From 1887 until his death he held the chair of political economy at the University of Michigan.

His distinctive importance in the field of social science lies in his pioneering efforts, among Americans, as an investigator of the province of government in economic affairs and as an active agent in its development. His contributions along these lines, particularly through his long service with the Interstate Commerce Commission, have exerted a potent influence upon the prevailing principles and practises of public control.

In the beginning of his career Adams' major inquiries were largely in the realm of public finance. His doctoral dissertation on the history of American taxation was followed by a book on public debts which has since become a classic. His keenly analytic *Science of Finance* was the first comprehensive treatise on public finance

by an American. He rendered his most enduring service in the sphere of public control of private enterprise. His monograph on the relation of the state to industrial action was a forerunner of much of the theoretical speculation from which the emerging period of governmental intervention drew its impetus. Imbued with the necessity of subjecting economic institutions and their concrete manifestations to the test of ethical standards and social consequences, he pointed out the shortcomings of unrelieved laissez-faire doctrine and developed guiding principles for the assertion of state power. To these basic problems of public control he returned again and again in his subsequent writings; and he also found himself in a position to exert practical influence upon their solution.

Through public service in the statistical and accounting field he was enabled to develop concrete institutional arrangements for railroad control. Beginning in 1888 he served the Interstate Commerce Commission, in charge of statistics and accounts, for a period of more than two decades. Recognizing from the first the supreme importance of full, accurate and comparable data as a basis for effective railroad regulation, he sought to make the required reports of the carriers as informative and reliable as possible. Despite grave obstacles significant improvement was achieved. By the statutory amendments of 1906 the carriers were required to submit their reports under oath, and the commission was empowered to prescribe uniform accounting systems and to enforce compliance with its prescribed requirements. Adams played an influential role in securing this strengthened legislative structure, and he was the central figure in developing the classifications and regulations in pursuance thereof. Cooperating for a number of years with the Committee of Twenty-Five of the American Railway Accounting Officers' Association, he succeeded in evolving a uniform system of accounts which constituted the first mandatory regulations for the steam railroads of the United States. While many of these original classifications have been superseded, and new accounting and statistical expedients are constantly emerging, the basic principles established by these classifications have largely survived. In its fundamentals, moreover, this system has been extended to other carriers subject to federal jurisdiction, and has been widely adopted in the regulation of local utilities. The strongest evidence of Adams' influence is found in the universal

acceptance of such prescribed accounting and statistical practise as an indispensable instrument of public control.

I. L. SHARFMAN

Important works: "Taxation in the United States, 1789-1816," *Johns Hopkins University Studies in Historical and Political Science*, vol. ii (1884) 263-341; *Public Debts* (New York 1887); "Relation of the State to Industrial Action" in *American Economic Association, Publications*, vol. i (1887) 465-549; "Economics and Jurisprudence" in *American Economic Association, Economic Studies*, vol. ii (1897) 1-48; *The Science of Finance* (New York 1898); *American Railway Accounting* (New York 1918).

Consult: Bigelow, S. L., Sharfman, I. L., and Wenley, R. M., "Henry Carter Adams" in *Journal of Political Economy*, vol. xxx (1922) 201-11, including a complete bibliography of his works; "Memorial to Former President Henry C. Adams" in *American Economic Review*, vol. xii (1922) 401-16.

ADAMS, HERBERT BAXTER (1850-1901), American historian. He was graduated at the head of the class of 1872 at Amherst College, studied in Germany, and in 1876 received the degree of Doctor of Philosophy at Heidelberg. He then went to Johns Hopkins University as one of its first group of fellows, soon began teaching there, and was successively associate professor and professor of history. In the seminar which he established he turned attention first to the study of the history of local government in America. The relations of church and state were also a favorite field of study with him. His strength, however, lay in organization rather than in research, and he deliberately chose to occupy himself with the building up of what became in his time the largest department of history in any American graduate school, instead of with historical writing. His only long book was *The Life and Writings of Jared Sparks* (2 vols., Boston 1893). Earlier he had broken new ground by founding the series of *Johns Hopkins Studies in Historical and Political Science*, and had written much on American educational history. His service to historical study in America lay not in doctrine but in the training and inspiring of a large proportion of the conspicuous historical scholars of the new generation, and especially in the organization in 1884 of the American Historical Association, of which he was the secretary until 1900 and the chief motive power from its foundation to his death.

J. F. JAMESON

Consult: "Herbert B. Adams, Tributes of Friends"

in *Johns Hopkins University Studies in Historical and Political Science*, extra vol. xxiii (1902), where a complete bibliography is given.

ADAMS, JOHN (1735-1826), lawyer, scholar, second president of the United States (1797-1801). He aided the cause of independence in Congress and helped draft the Declaration of Independence. It was as an apostle of equality and the rights of man that he expounded in *Thoughts on Government* (Philadelphia 1776) a liberalism tempered by a firm belief in checks and balances. He helped negotiate peace with England in 1783 and served as minister to England (1785-88). The disorders of the "critical period" following upon peace changed him into a conservative, and in *A Defence of the Constitutions of Government of the United States of America* (3 vols., London 1787-88) and *Discourses on Davilla* (Boston 1805), published originally in *The Gazette of the United States* (Philadelphia, April 28, 1790-April 27, 1791), he appears as our ablest defender of aristocracy. Discarding his early belief in the equality of man, he urged that government, though necessarily based upon popular sovereignty, must be administered by the rich, well-born and capable, under a system of checks and balances which would prevent the tyranny of majorities. He favored life tenure for office holders and a hereditary titled nobility. He served as vice president during the two Washington administrations and assumed the presidency in 1797, the exponent of a conservative New England Federalism and the leader of a badly divided party. While able, honest and fearless, his irascibility, stubbornness and want of tact rendered him unequal to the task of uniting the Federalists in the face of Hamilton's bitter enmity, or of saving them from blunders which caused their defeat at the end of his term. He rated among his greatest achievements the preservation of peace with France in 1798, and the appointment of John Marshall to the chief justiceship in 1801.

ROBERT E. CUSHMAN

Works: Works, ed. by Charles Francis Adams, 10 vols. (Boston 1850-56).

Consult: Adams, J. Q., and C. F., *Life of John Adams*, 2 vols. (Philadelphia 1871); Morse, J. T., Jr., *John Adams* (Boston 1884); Morse, A. D., "The Politics of John Adams" in *American Historical Review*, vol. iv (1898-99) 292-312; Merriam, C. E., *History of American Political Theories* (New York 1903) ch. iii; Walsh, C. M., *The Political Science of John Adams* (New York 1915).

ADAMS, JOHN QUINCY (1767-1848), American statesman and diplomat. He was the son of John Adams, second president of the United States. His public service began, after education at Harvard and travel abroad, when he was appointed in 1794 minister to the Netherlands and in 1797 to Prussia, with special commissions to Great Britain. He was retired upon Jefferson's taking office, and in 1802 elected senator from Massachusetts. Before his term was over he had become a Republican, and in 1809 he was made minister to Russia. He served as chief of the peace commission at Ghent, as minister to Great Britain, and from 1817 to 1825 as secretary of state. From 1825 to 1829 he was president of the United States.

Up to this point Adams was perhaps the most complete and ardent champion of American rights and American destiny. He upheld the violent action of Andrew Jackson in Florida, annexed that region and others to the west of it, and sought the acquisition of Cuba and Texas. He violently attacked the attitude and conduct of Great Britain, and was chiefly responsible for the formulation of the Monroe Doctrine, which was in large measure directed against that country. On domestic questions he was a nationalist, favoring a protective tariff and public works. But after his election to Congress in 1831, upon his retiring from the presidency, his interest came to center more and more on opposition to slavery, resulting in his wide popularity in the North as defender of the "right of petition." He was led also to reverse his former position on national expansion. Although he continued to be an independent he developed political connections with the Anti-Masonic, the National Republican and the Whig parties. He remained a member of Congress until his death in 1848.

His boundless vitality sought many other outlets. In 1806 he accepted a professorship of rhetoric at Harvard, and his published lectures did much to encourage the outburst of oratory which characterized the next generation. As secretary of state he edited, or supervised the editing of, many state papers which have proved foundation stones for our study of American history. One of his most important acts was to utilize the Smithsonian bequest for the creation of the institution bearing that name. His very numerous writings include state papers, a great many occasional publications, and more elaborate works, such as his lectures on rhetoric, his

lives of Madison and Monroe, and his books describing his travels in Silesia. Perhaps his most important work is his *Memoirs*, comprising extracts from his diary from 1795 to 1848, edited by C. F. Adams (12 vols., Philadelphia 1874-77). His *Writings*, covering the period from 1779 to 1823, are edited by W. C. Ford (7 vols., New York 1913-17).

CARL RUSSELL FISH

Consult: Morse, J. T., *John Quincy Adams* (Boston 1909); Ford, W. C., and Adams, C. F., *John Quincy Adams* (Cambridge, Mass. 1902).

ADAMS, SAMUEL (1722-1803), American statesman, cousin of John Adams. He was born in Boston and educated at Harvard (A.B. 1740; A.M. 1743). He inherited from his father Samuel a fair estate which he soon lost through neglect and mismanagement. Politics was his chief interest and after 1764 his only occupation. Skill as a political organizer and as a polemical writer gave him the leadership of the radical party. He was a member of the Massachusetts House of Representatives (1765-74), and as clerk (1766-74) wrote most of its state papers. He was one of the chief organizers of the opposition to the Stamp Act and the Townshend Acts, and by inflaming the popular dislike of the troops was a prime influence in bringing on the "Boston Massacre" (1770). When the controversy everywhere abated (1771-73), Adams revived it by his persistent attacks on Hutchinson, whom he regarded as a pliant tool of ministers. He organized the Massachusetts committees of correspondence to protect American rights (*Writings*, vol. ii, p. 348-50) when most people supposed they were at last secure. By some oversight he failed to foresee the importance of the Tea Act, but when the tea arrived he directed the opposition which ended by throwing it into the harbor (Wells, vol. ii, p. 110 *et seq.*). Adams was at first opposed to the belief that a continental congress would be the best means of supporting Massachusetts against the Coercive Acts (*Writings*, vol. iii, p. 115), fearing that it would prove too conciliatory, but he supported it eagerly when it was apparent that one would be assembled (*Ibid.*, vol. iii, p. 126). As a member of the Continental Congress (1774-81) he worked effectively for the passage of a series of resolutions known as the Association, was an early advocate of separation, signed the Declaration of Independence, and served on the committee to draft the Articles of Confederation. In 1779 he was one of the committee

that drafted the Massachusetts constitution, and author of its bill of rights. He at first opposed the adoption of the federal constitution, but was induced by clever manoeuvres to support it on condition that a bill of rights be added (Wells, vol. iii, p. 248, 260). He joined the Democratic-Republican party, served as lieutenant-governor of Massachusetts (1789-94), and as governor (1794-97).

Adams' effective work ended with 1776. Essentially a *frondeur*, he was never effective and rarely happy except in opposition. Skilled in the tactics of undermining authority, he was of little use in building it up. As a polemical writer his adroitness was all in attributing sinister motives to his opponents, while investing his own activities with a flavor of disinterested service in the cause of humanity. In political and religious faith, in the naive doctrinaire outlook of a limited but acute mind, in a genuine passion for liberty, Adams was representative of his century. Like Saint-Just and Robespierre, he loved humanity but suspected most men; and if, like Siéyès, he had mastered the science of politics, it was only because, like Madame Roland, he identified the activities of real men with abstract propositions about them.

CARL BECKER

Works: *Writings 1764-1802*, ed. by H. A. Cushing, 4 vols. (New York 1904-08); Massachusetts Historical Society, *Warren-Adams Letters*, 2 vols. (Boston 1917-25).

Consult: Wells, W. V., *The Life and Public Services of Samuel Adams*, 3 vols. (Boston 1865); Hosmer, J. K., *Samuel Adams* (Boston 1909); Harlow, R. V., *Samuel Adams, Promoter of the American Revolution* (New York 1923).

ADAMSON LAW. *See* RAILROADS, section on *Labor*.

ADAPTATION. The lack of precision in the use of this term in biological and sociological literature is due to the fact that it designates both a process and a state. It most frequently signifies those processes whereby a living organism is fitted to its physical and organic environments. The adaptive processes result in such modifications of structure and function as will facilitate growth and reproduction under the given conditions. The term "adaptation" is also used to indicate the end result of such modifications, or the state of being adapted. In this latter sense it is equivalent to "adjustment," or such harmonious relationship between organic traits and essential conditions of life as to

insure survival of the type. In the social sciences adaptation is used in both senses, though most commonly in the former. The term "accommodation" is also used to designate that part of the adaptive processes whereby conflicts are resolved and conflicting elements brought into a state of mutual toleration and hence of cooperative functioning. Conflict, competition, rivalry and emulation are as much parts of the processes of adaptation of individuals and groups to each other as are mutual aid and cooperation.

The modern uses of the term mark a revolution in scientific and philosophical thought. The theologians had found in the marvelous adaptations throughout nature most convincing evidences of an Omnipotent Designer of the universe. The biologist sought a naturalistic explanation of such harmonious interrelations. Lamarck found it in the inheritance of acquired characters, a doctrine now seen to be of limited value, if not wholly untrue. Darwin found it in the combined effects of variation, selection and heredity. He found that those variates of any plant or animal which more nearly fit the environment tend to live longest and leave most progeny. As Spencer said, there is a "survival of the fittest." Through inheritance their traits become more and more general, thus producing a progressively more perfect adaptation, or adjustment, to the requirements of the situation. Darwin's theory of variation has been supplemented by mutationism; and experimentation has shown that selection does not actually result in the production of new types but rather in the segregation of existing types and the preservation of mutant traits having survival value. Environmental selection does not produce adapted types; it preserves them. The Negro, for example, is black because dark mutant types occurring in his ancestral stock have been favored by climatic conditions. Mutations have also affected hair, eye color and skin texture so as to increase his adaptation to heat and sun.

Biological adaptation applies not merely to physical traits but to those reflexes and instincts which constitute an integral part of an animal's adjustment to the major elements of its environment. In man fixed inherited patterns of behavior have been very largely replaced by an unequalled capacity to learn, or to acquire habits suitable to his cultural medium. Adaptation is thus an organizing process, or the gradual development of an integrated scheme of structures and functions suited to a more or less definite mode of life under specific condi-

tions. This process is the outcome of the stimuli and repressions of the environment acting on the potentialities of the organism and producing a greater or less degree of success in the struggle for existence.

The different races of men have obviously undergone more or less environmental selection, notably in adaptation to temperature, moisture, sunlight and altitude. The white, yellow and black stocks have different climatic optima and different ranges of climatic toleration. But such physical adaptations are necessarily more general than specific. They are achieved only over long periods of time, and hence through race mixture and migration tend to become so obscured that broad and true generalizations regarding them are difficult to attain. Moreover man adapts himself to his habitat not so much by mutational differences as by cultural achievements. There is consequently a striking and radical difference in the cultures of peoples living in such widely different habitats as arctic and desert, or wet and torrid. But here again we must note that migration, trade, travel and war diffuse culture traits over areas far distant from those in which they arose. Moreover man succeeds to a degree in adapting the environment to his own purposes. While, therefore, culture must always be adapted to insure survival in a given habitat, the environment is powerless to produce culture traits. Man alone is their architect; and the extent and manner of his utilization of environmental possibilities depends on the state of his cultural advancement. It should not be overlooked, however, that the intelligent adaptation which it is the mission of science to achieve does not free man from nature; rather it signifies an increasing harmony between his mode of life and nature's laws.

Social life and cultural evolution are carried on by means of complicated processes of mutual adaptation among individuals, groups and cultural traits. By education and training the habits of the rising generation are fitted to the prevailing standards of manners and morals. Powerful institutions of social control adjust the differences and rivalries of groups and classes. New culture traits are fitted into the general pattern of life, and revolutionary inventions, such as the capitalist system of industry, ultimately transform every feature of the culture scheme. Cultural evolution is thus a continuous process of mutual adaptation of all parts of an interrelated whole. Society, whether

local group, nation or international community, is a vast collection of elements mutually adapting and readapting themselves to each other so as to maintain themselves in a condition of moving equilibrium. Social adjustments are, therefore, never perfect, because of the conflicts of group interests and values, the extraordinary variability of human nature and the varying hold of social tradition on individuals and classes. Not only do individuals often become badly adjusted to the requirements of their times, but the competitions of groups may break out into open warfare, leading to new bases of mutual toleration and accomodation.

FRANK H. HANKINS

See: ACCOMODATION; ADJUSTMENT; ACCLIMATIZATION; ENVIRONMENT; STRUGGLE FOR EXISTENCE; BIOLOGY; HUMAN GEOGRAPHY; ASSIMILATION, SOCIAL; CHANGE, SOCIAL; CULTURE.

Consult: *Organic Adaptation to Environment*, ed. by M. R. Thorpe (New Haven 1924); Thomson, J. A., *Darwinism and Human Life* (New York 1910); Chatterton-Hill, G., *Heredity and Selection in Sociology* (London 1907); Huntington, Ellsworth, *The Character of Races* (New York 1924); Bristol, L. M., *Social Adaptation* (Cambridge, Mass. 1915).

ADDISON, JOSEPH (1672-1719), poet, dramatist, member of Whig governments and literary apologist therefor. He had a permanent influence on morals and journalism through his periodical essays in those admirable journals of society, the *Tatler*, the *Spectator* and the *Guardian*. He was the first English critic, in the light vein, of both morals and manners, and with Sir Richard Steele created a vehicle for instructive and entertaining comment that served as a model for many similar magazines and substantially influenced our later periodical literature. His method was that of wit and satire; his purpose to correct the affectations and licentiousness of his time. Vice and profligacy were painted in their true colors by Addison, who destroyed the idea that genius and wit had to depend upon indecency. He reconciled virtue and good sense, yet escaped the Puritan gloom. The wit of his social satire was humane and gracious, unmarred by malice, coarseness, the bitter contempt for humanity of Swift or the ironic cynicism of Voltaire. Good nature, good sense and good feeling mark his thought; and his wide range of interest in the daily problems of human life served both his own age and posterity.

He made his themes entertaining and edifying to a popular audience, bringing, as he says,

"philosophy out of closets and colleges to dwell at tea-tables." This is his great contribution: he revealed the power for instruction and reform of what today we call human interest and the feature article. He created characters, used drama and allegory and spiced all with humor set forth in a style miraculous for a sweet clarity. He made literature a part of daily life, thus giving to journalism a new field between the daily news sheet and the controversial pamphlet, and a new technique that avoided equally the sensation mongering of street literature and the classic aloofness of the essay by Bacon or Milton. Addison (with Steele) also first discovered women as readers and discussed their interests, recognizing them as part of the popular audience, though with an unflattering criticism of their empty pursuits. His good sense and humanity, his moral purity and reverence for the sublime in man and nature, set him as a milestone in the progress of social criticism.

LEON WHIPPLE

Works: *Works*, ed. by G. W. Green, 5 vols. (New York 1853-54).

Consult: Courthope, W. J., *Addison*, English Men of Letters Series (London 1884); Paul, A., *Addison's Influence on the Social Reform of His Age* (Hamburg 1876); Escott, T. H. S., *Masters of English Journalism* (London 1911) p. 70-81.

ADELUNG, JOHANN CHRISTOPH (1732-1806), German historian, philologist and lexicographer. He was educated at the University of Halle and from 1787 until his death he was chief librarian at Dresden. In his *Versuch einer Geschichte der Kultur des menschlichen Geschlechts* (Leipsic 1782) Adelung brought into use the term *Kulturgeschichte* as a substitute for the old term *Geschichte der Menschheit*. History, for him, is not a record of military exploits or political affairs, but an account of cultural evolution. Only by the increase in enlightenment and in intellectual development can the progress of the times be measured. He was also the first to advance the theory that the highest stages of cultural growth were reached by the most densely populated countries.

Adelung is more important, however, as a philologist and lexicographer. No man before Jakob Grimm did so much for the German language. By means of his monumental *Grammatisches-kritisches Wörterbuch der hochdeutschen Mundart* (5 vols., Leipsic 1774-86) and his *Magazin für die deutsche Sprache* (Leipsic 1782-

84) he contributed greatly toward fixing the standards of the German language. Through his philological work he did much to stimulate German national feeling. In his *Ueber die Geschichte der deutschen Sprache* (Leipsic 1781) and in his *Ueber den deutschen Styl* (Leipsic 1785, 4th ed. Berlin 1800) he insists on preserving the purity of the German language. He maintains that borrowings from foreign languages come only as a result of ignorance of the richness of the original German tongue. Language is both the expression of the national character and the chief factor differentiating one nationality from another. He therefore calls for a more diligent study of the German past. In his *Mithridates oder allgemeine Sprachkunde* (vol. i, Berlin 1806, vols. ii-iv edited and completed by J. S. Vater, Berlin 1809-17) he formulated the idea of an original Aryan language, a hypothesis which became important in the growth of the Aryan race theory in the nineteenth century. Adelung's work became the model for various Slavic scholars like Linde, Jungmann and Dobrowsky; thus he indirectly contributed to the national renaissance of the Slavic nationalities.

In addition to his more scholarly work Adelung was also active as compiler, translator and journalist.

KOPPEL S. PINSON

Consult: Schaumkell, Ernst, *Geschichte der deutschen Kulturgeschichtsschreibung* (Leipsic 1905) p. 110-13.

ADJECTIVE LAW. *See* PROCEDURE, LEGAL.

ADJUSTMENT has much in common in meaning and usage with the terms accommodation and adaptation. The word has been employed in several departments of human thought. Aside from common parlance the term is used in the fields of material phenomena, such as mechanics, in biology, in psychology and in the social sciences.

In mechanics adjustment connotes rearrangement of parts to produce better functioning, such as setting the screws of a lathe or setting the springs of some measuring device. In fact the term has been widely used to denote the fixing of precision instruments in order to make more accurate physical measurements. This in turn implies the determination of a standard or norm of measurement in reference to which adjustment is made. In natural science the norm of adjustment is fairly easy to calculate in terms of probabilities of observation and

verifiability through repeated use of exact instruments.

In the biological world the term has had two usages: one rather narrow, exemplified by the cognate word "adjustor" in reference to certain muscle groups, especially the brachioradials, and by the phrase "adjustor neurone" in reference to the central neurone of the reflex arc; in the wider sense the word is used as practically synonymous with adaptation. Thus Herbert Spencer stated in his *Principles of Biology*: "Throughout all phases of Life up to the highest, every advance is the effecting of some better *adjustment* of inner to outer action." In biology, then, the term has been used, first, in reference to the balance between various organs or parts of the organism in their total functioning, and second, in the sense of the relationship of the total organism to its inorganic and plant and animal environment. The former phase is that of morphology and physiology, the latter that of ecology. In the latter sense the whole concept takes on a more dynamic meaning, as in the phrase "the process of adjustment" of the organism to its surrounding world. Nevertheless in the biological world the norm of adjustment is more difficult to determine than in the inorganic world. Perhaps the statistical average offers the best determination of this norm. But even so it is largely relative to conditions in the organism and in the environment.

In psychology the terms accommodation and adaptation were in far more frequent use than adjustment until the rise of a more distinctly objective, mechanical standpoint in studying the behavior of organisms. The word adjustment did appear in the quantitative manuals of laboratory exercises, but again largely in reference to mechanical fixation of instruments for exact measurements of the temporal phases of reaction, especially in experimental work which rested largely on physics, as in the field of vision and audition. So, too, the phrase "observational adjustment" was used in psychology with special reference to the statistical averaging of experimental findings.

The more frequent use of the term in psychology arose out of two recent influences—behaviorism and psychiatry. Watson employs the term in reference to kinesthetic-motor and other processes. In fact he uses the terms "adjustment," "response" and "reaction" almost interchangeably. Adjustments are both "partial," as in blushing, winking, "single habits," etc., and "complete" in the sense of

the consummatory responses of the whole organism in reference to the stimuli. Watson makes clear his usage of the word by reference to the cycle of the organism's responses, from physiological tensions, in the absence of food, for example, to the completion of the activity when the taking of food results in the release of these tensions. The correlation of the concepts of psychiatry, including psychoanalysis, with objective studies in behavior led, in such a field as education, to discussions of the "adjustment" of children to school environments, to parents, to teachers and to other children. On the pathological side there has been considerable employment of terms like "poor school adjustment," "unadjusted school child," "mal-adjusted child." The term has been in frequent use in the last decade among writers in the field of pedagogy. Here again the matter of norm or standard arises, and there is always an implicit if not explicit standard, often vague, of what constitutes normal adjustment. Statistical averages of behavior or more qualitative standards of social valuations have been used as the norms of adjustment.

In sociology, likewise, the term has grown up in two fields: in systematic sociology, where the term is used synonymously with adaptation of the organism to social environment; and in the field of social pathology, in which the word is employed with regard to the relations of the person to his family, community, political state or economic order in reference to some assumed standard or norm. In connection with systematic sociology the term has come into common parlance in the discussions of human ecology, in which emphasis is placed upon the adjustment of the personality to its geographical and social environment. In the latter field the term has been borrowed from clinical psychiatry and psychology in treating social problems of crime, delinquency, poverty and relief, feeble-mindedness and the social implications of divergent personal life.

In anthropology the term "race adjustment" has appeared in treating racial and sub-racial group relations. In political science adjustment has been employed to describe functions and relations of governmental agencies. In economics it has been used in reference to insurance settlements, to wage and hour arrangements between employers and employees and, in loose usage, to supply and demand and price relationships.

KIMBALL YOUNG

See: ACCOMODATION; ADAPTATION; ASSIMILATION,

SOCIAL; ENVIRONMENT; EVOLUTION; MALADJUSTMENT; BIOLOGY.

Consult: Wells, F. L., *Mental Adjustments* (New York 1917); Dexter, R. C., *Social Adjustment* (New York 1927).

ADLER, GEORG (1863-1908), German economist and historian of socialism. He was born in Posen and held professorships in economics at Freiburg i. Br., Basel and Kiel. His youthful interest in socialist ideas, which he later rejected as utopian, led him to write important critical works on the early history of socialism and on Rodbertus and Marx as the founders of scientific socialism. He was a severe critic of Marx but admitted the historical necessity of the socialist movement and its importance in bringing about social reforms which would lead eventually to a type of economic constitutionalism. Adler, in accord with his general social philosophy, was one of the first advocates in Germany of international legislation for the protection of labor. He also made contributions to economic history and was distinguished as a lucid writer and successful teacher.

K. DIEHL

Important works: Rodbertus, *der Begründer des wissenschaftlichen Sozialismus* (Leipsic 1884); *Die Geschichte der ersten sozialpolitischen Arbeiterbewegung in Deutschland* (Breslau 1885); *Die Grundlagen der Karl Marx'schen Kritik der bestehenden Volkswirtschaft* (Tübingen 1887); *Die Frage des internationalen Arbeiterschutzes* (Munich 1888); *Geschichte des Sozialismus und Kommunismus* (Leipsic 1899).

Consult: Jaffé, G., "Georg Adler" in *Historische Monatsblätter für Posen*, vol. ix (1909) 169-79.

ADLER, VIKTOR (1852-1918), founder and leader of the Austrian Social Democratic party. He was born in Prague of well-to-do parents, but while he was a small child his family moved to Vienna, where he remained until his death. He practised medicine and, because of his early interest in the condition of the working classes, was anxious to become a factory inspector, but he did not succeed in securing an appointment from the reactionary government. Under the personal influence of Bebel and Engels he joined the Social Democratic party in 1885. A year later Adler founded a weekly, *Die Gleichheit*. In 1888, largely through his efforts, the hostile moderate and radical factions of the party were brought together at the Hainfeld convention and a united party was formed. In 1889 he founded the *Arbeiterzeitung*, published first as a weekly and converted into a daily in 1895. It

became the official newspaper of the party and today is still one of the leading organs of the Second International. In 1905 Adler was elected to the lower chamber and remained a member until his death. A year later his great struggle for universal suffrage was brought to a successful conclusion. As the leader of the party in 1918 Adler provided the driving force for the creation of a republic of German Austria; as its first foreign minister he declared its willingness in principle to join republican Germany. He was then already fatally ill and died on November 11, one day before the official declaration of the establishment of the Austrian Republic.

Adler has been falsely called an opportunist averse to theory because in the difficult pre-war situation he was constantly driven to mediation and compromise, first between the hostile factions of the party and later between the various nationalist movements of the polyglot empire. However, a thorough study of his tactics proves, and many of his pronouncements confirm, that he constantly sought to orient his tactics in the direction determined by Marxian theory. In addition to being one of the most distinguished Marxist political leaders, Adler wrote several very interesting articles on Marxism, found in the first volume of his collected *Aufsätze, Reden und Briefe* (10 vols., Vienna 1922-28).

MAX ADLER

Consult: Adler, Max, "Zur Würdigung Victor Adlers" in *Archiv für die Geschichte des Sozialismus und der Arbeiterbewegung*, vol. xi (1923) 174-83; Brügel, L., "Victor Adler" in *Neue österreichische Biographie*, ed. by Anton Bettelheim, vol. i-vi (Vienna 1923-) vol. iii (1926) p. 152-72.

ADMINISTRATION, BUSINESS. *See* BUSINESS ADMINISTRATION.

ADMINISTRATION, PUBLIC.

THE BACKGROUND OF MODERN ADMINISTRATION. Public administration is defined by modern writers as the art and science of management applied to the affairs of the state; the term is also used to indicate a branch of the field of political science. In the former sense public administration displays a history coextensive with organized government, and under changing forms marches through the centuries down to the specialized and highly developed systems which are characteristic of modern industrialized states. From some remote period beyond the Egyptian kingdoms, through classical antiquity, the feudal system and the ab-

solute monarchy, into the era of the democratic state, it has been necessary to transact the business of politically organized mankind. These operations collectively are known as public administration.

Fundamental changes have occurred in practice and theory in this long evolution. The general character of administration has always been governed by the physical basis of state organization, by the prevailing level of social and cultural organization, by the development of technology, by theories of the function of the state and by more immediate governmental and political traditions and ideals. In the ancient world and among primitive cultures the circumstances of physical conditions counted heavily. The factor of distance in the administrative system of the Greek and Roman empires on the one hand, on the other the existence of the Nile traversing the administrative areas of the Egyptian kingdom, may serve as obvious illustrations of the point. But geography thrusts its influence straight into the modern administrative world as well, as may be discovered by any who care to dip into the recent literature on regionalism, or by the more technically minded who care to examine the structure of administrative areas in any contemporary government.

In the ancient world it was more nearly true that public administration tended to set the pace in the general improvement of social organization. In the modern world the state no longer pretends to the monopoly which it enjoyed in the ancient; corporations and associations reach far across the boundaries of the state and equal if not exceed the organization of public affairs in extent, complexity and variety. The International Red Cross, international cartels, great national industrial and financial organizations such as the United States Steel Corporation, the Allgemeine Elektrizitäts Gesellschaft, J. P. Morgan and Lloyds fling their organizations over the whole world; and the application of thought to problems of management is more systematic and sustained outside government than within. Governmental organization in the modern world follows rather than leads in the constant improvement of general technique of administration.

How completely the methods of administration have changed is nowhere better illustrated than by reference to some common technologies. For example, take communication, an essential and continuous phase of all

administration, public and private. In the ancient world rulers depended on a horde of slaves who darted hither and thither with messages to officials and tax gatherers. Now the assistant secretary of the British Home Office may be in constant personal communication with any official in the United Kingdom by telephone, and with officials in the outlying parts of the empire by cable or beam radio. Or compare the laborious writing on rolls by a fourteenth century English clerk, so gracefully described by Professor Tout, with the ubiquitous clatter of the modern typewriter or the reproductive capacities of the multigraph or planograph.

But it is not merely the advance in technology culminating in such devices as these which enables modern administration to exist; the invention and improvement of administrative procedures are equally significant. A great gulf separates the accounting of the eleventh century sheriff of Kent who proceeded to Westminster with his accounts and specie, and whose receipt was a notched stick split in two sections, from the elaborate financial and accounting procedures which control the handling of annual sums running into the billions of dollars. How shall we compare the methodology of the census of William the Conqueror, recorded in 1086 in the Domesday Book, with the electrically driven card punch and sorting machines which manipulated the facts about 100,000,000 Americans on the occasion of the thirteenth census? Or how can we assimilate the managerial duties of the mediaeval *échevin* of Saint-Quentin with those of the city manager of Cleveland, Ohio? Technology, in short, has made such strides that the process of administration seems almost to have changed in kind as well as in degree; and it is only upon technological improvements that administration of the intensity and continuous power of the modern state can rest.

Modern administration emerged from the feudal system along with the national state; and its scope has always been profoundly affected by prevailing theories of the function of the state. Mercantilism, with its insistence on public regulation of agriculture and industry and with its control of the fiscal system so devised as to secure a favorable balance of trade, built up an eighteenth century administrative system of considerable magnitude. Mercantilist theory combined with contemporary emphasis upon absolutist concepts of

royal power to construct a powerful organization operating at the discretion of king and ministers. Abuse of power, often abuse of administrative power, weakened the authority of these organizations, in England in the seventeenth, in France in the eighteenth, and in Germany in the nineteenth centuries.

Their ultimate destruction, however, came through the change in political and economic philosophy attendant upon the first century of the industrial revolution. Laissez-faire as a guide to statesmen supplanted the interventionist ideas of mercantilism; and administration withered toward an ultimate minimum of keeping peace and order, collecting taxes and maintaining public works and buildings—duties which were often discharged by local rather than by state officials.

Such an administrative inheritance was received by the newly recognized American states in 1789. It fitted admirably the physical and social data of the period. Means of communication were tedious and uncertain; the population was scanty and dispersed; the movement of the population was at a minimum; the factory system was unknown, substantially the whole population being engaged in farming, fishing and simple commercial operations; money was scarce and the average income slender. For such a people a decentralized self-governmental and inexpensive system of administration was essential.

In the United States, as in England, France, Germany and other industrialized states, the industrial revolution which precipitated an era of laissez-faire politics eventually led to a new era of state intervention. A new world rapidly emerged in which old ideas led to such abuse that the state was required to step forward once more to the task of regulating the economic life of its people. The factory system created new industrial urban centers; the railroad enormously increased the mobility of persons; the steamboat expedited mass movements of population; modern problems of health were envisaged, as medical and sanitary science made the amazing progress of the last half century; unregulated industrial competition gave rise to the gravest social problems for the working class. In short the modern world with its complex of economic-social-political problems took the stage; and as it faced its problems the state turned largely to its administration for the solution.

Thus have flowered the diverse and ubiqui-

tous administrative systems of the twentieth century. The state has been compelled to inspect and regulate factories, to modify the competitive system of regulation of hours and conditions of work, by fixing minimum wages and by insuring individual and social protection against the hazards of modern life by extensive plans of social insurance. The state elaborately and minutely conditions the operation of public utilities or displaces them by various forms of state enterprise. The state assumes a positive role with regard to public health, destitution, defectives and delinquents. The state recognizes responsibilities, in America on a vast scale, for the education of its citizens. The state and its subdivisions embark on far reaching plans of construction of public works, conservation of natural resources and provision of facilities for recreation and the enjoyment of the arts. Finally the state undertakes to control conduct in many novel ways, whether by restricting freedom of movement and intercourse, as in certain European countries, or by restricting the use of alcoholic beverages, as in the United States, or by combating belief in certain political dogmas.

The administration of the affairs of the state has been deeply affected by various external conditions other than those to which reference has already been made. Political influence has handicapped public administration in most states, perhaps most lamentably in the United States. Here as elsewhere this handicap is gradually declining in importance. Competition with business administration disturbs the stability of personnel in the United States, particularly in the professional and technical service; this factor counts for relatively little in Great Britain or on the continent. There the prestige value of public employment is sufficiently great to be accounted a positive helpful influence in maintaining efficiency and esprit de corps. Everywhere the degree of public confidence in officialdom counts heavily in forming the character of the administrative service.

Administrative methods have been greatly extended and strengthened as the scope of state business has enlarged. The traditional clerk of Anthony Trollope dealt with papers in the seclusion of his office, and much nineteenth century administration was summed up in the activities of the writing assistant. Six of every ten modern civil servants spend their official life away from headquarters in the field service in actual contact with the world of affairs, in-

specting, authorizing, prohibiting, encouraging, ruling and adjudicating. To the modern civil service have been granted powers of initiating new rules of conduct (rule-making power) and powers of determining liability in the first instance, sometimes conclusively (quasi-judicial power). The administration is thus acquiring ranges of influence which trench on the traditional duties of legislatures and courts.

PROCEDURES AND PRINCIPLES. This positive role of the state is responsible for the development and maintenance of the vast administrative structures which now characterize modern governments and which distinguish them so sharply from their predecessors. Their effective management gives rise to the modern problem of administration. But the existence of these organized bodies of permanent professional civil servants sets also significant problems of their control, as well as other problems of their most effective correlation with legislative bodies and courts. In the following paragraphs is presented a brief summary of this subject matter, which in its generalized form is common to the management of any organized group: business, philanthropy, education, the church.

The philosophy and procedures of scientific management, first stated by Frederick W. Taylor, have set up new ideals which government and business are now seeking to approximate. Taylorism is driving Jacksonian democracy into the limbo of outworn creeds in every extensive administrative system in America, and is exerting a deep influence upon European systems as diverse as the French and the Russian. Scientific management insists upon the one best way of performing any operation, the discovery of which is a responsibility of the higher officials, using strictly scientific technique. Scientific management therefore looks toward the elimination of waste, the standardization of processes, the improvement of technique and the most nearly perfect adjustment of the worker to his work. In the industrial world it envisages a constantly increasing productive power; in the governmental world it indicates reduction of taxation or extension of service.

Public administration has been less successful in adopting either the ideals or the methods of scientific management than have the more progressive industrial concerns. Governments are not engaged in mass production of standardized articles, the process in which scientific

management has made its most striking achievements. Many public enterprises are on so limited a scale as to prohibit any significant refinement of technique. The traditions of the public service are often unfavorable to scientific management, and trade union influence is frequently strong in opposition. Motivation among public officials is much less related to profit taking than in industry, and in the public service profits seldom serve as a measure of success. Nor does competition affect public administration to any substantial degree. In spite of these handicaps steady progress has been made in developing definite and well understood procedures, the more important of which are sketched below.

Historically perhaps the first which requires mention is the establishment of permanent tenure and methods of selection intended to secure competent officials and employees. A Prussian code of 1794 recognized permanent employment as a *fait accompli*; English pension legislation of the early nineteenth century made similar assumptions which were confirmed in 1855; in France no legislation has yet declared the principle, which is nevertheless generally recognized; in the United States the Pendleton Act of 1883 finally inaugurated the principle, which has now been extended to protect the bulk of the federal service, some of the states and most of the large cities. A recent decision of the Supreme Court of the United States (*Myers v. United States*, 272 U. S. 52), however, confirms the power of the president to remove any officer of the federal system, and almost nowhere in the United States are there jurisdictional guarantees similar to those which exist in France. Permanence of tenure nevertheless has come to be a distinguishing characteristic of the modern civil service.

The expectation of permanent service made inevitable greater care in selection. Progressive refinement has been made in formalized examinations, which have thus developed from simple pass examinations through free answer competitive tests to the standardized short answer tests and psychological tests of the present day. English examinations for the higher branches of the service have always been academic in character, intended to discover the finest brain power in each generation of university men, without specific reference to their knowledge of administration.

Recent developments in the United States are rapidly substituting tests of aptitudes, skills

and general intelligence for tests of special knowledge. For the higher branches of the Prussian and German imperial administration a university examination gave access to a prolonged period of special training in law and administration which was concluded by a state examination. In Anglo-Saxon countries current disquietude as to the validity of the examination process is paralleled by persistent and significant attempts to improve the selective power of tests. After a protracted controversy there is, however, general agreement among responsible administrators that some type of examination is both feasible and essential.

As the variety, extent and complexity of public administration developed, and its costs mounted, the need for coordination and central direction became urgent. The Conseil d'Etat (*q.v.*) in France was one of the earliest modern inventions to meet this need. During the history of the German Empire the Bundesrat (*q.v.*) performed functions as the coordinating center of imperial administration. In Great Britain the Treasury has long exerted powers of coordination and control over the whole administrative system.

These powers include the formulation of the budget and the revision of departmental estimates; the specific approval of all departures from the financial votes of Parliament and approval of all new or increased expenditures; general control of such expenditures as those for supplies, printing, public buildings and quarters; and, since the war, specific control of establishments, fixing the number, salary and promotion prospects of employees in all departments. The British Treasury has now become one of the most powerful agencies of general management to be found in any system of public administration; its rationale may be read in the brilliant report of the Haldane Committee on the Machinery of Government (Cd. 9230, 1918).

Similar institutions have recently been established in the United States. Among these may be cited the Illinois Department of Finance (1917), the United States Bureau of the Budget (1921), the Massachusetts Commission on Administration and Finance (1923) and the executive department of the state of New York (1926). These agencies are primarily fiscal in character, exerting a general control over administration through fiscal mechanisms. With variations in emphasis they deal with budget making, current control of expenditures, cen-

tralized purchasing, supervision of printing and, to a less degree, control of personnel.

They are in fact a civil general staff, deriving their real authority from the chief executive and operating to make effective his constitutional position as general manager of public business. In some American quarters fears have been expressed lest so powerful an agency should be abused by politically elected chief executives. The danger exists here and there. In any case those who believe in the democratic faith must place confidence in the beneficial effects of public education, gradually developing higher standards of public morality; they will be profoundly reenforced by the very nature of the modern administrative process, which constantly becomes more technical and more pregnant with social good or ill.

In such administrative systems as that of Fascist Italy, standards do not depend on popular vote, and this problem does not arise. Fascist administrative organization in fact stands at the opposite pole from the American. The contrast between the underlying principles of the two systems brings out the types of organization which are characteristic of the modern world. On the one hand are centralized systems in which administrative authority is concentrated in the hands of national officials, in whom is vested the responsibility for all administrative action, central or local, who appoint, supervise and at will remove local agents to execute orders issuing from above. Richelieu developed this system into full vigor, Napoleon renewed it after the revolution, and with variations it has conquered the Latin world. On the other hand are decentralized systems, inherent in the structure of federal states and characteristic of Anglo-Saxon civilization, in which local autonomy prevails over the demands of central control, yielding in the face of modern economic problems but retaining a powerful vitality well displayed in the home rule movement for cities in the American commonwealths. These contrasting types are more than diverse solutions of administrative problems, for they are based on dominant and settled points of view involving the whole relation of citizen to government, and are affected by the role each state plays on the stage of international affairs. Strong centralized administration is often in part the outcome of international fear.

The centralized type of administration is related to the bureaucratic (i.e. the professional),

the decentralized type to the self-governmental (i.e. the amateur). Fascist Italy has eliminated the amateur from her administrative system in favor of a politico-professional bureaucracy; the United States, in spite of the technical nature of many aspects of administration, is still powerfully influenced by preference for amateur self-governmental forms. It is estimated that over 750,000 public officials are still elected by the American voters in local, state and national elections. This is a reflection of the rural character of vast areas of the United States as well as of a special theory of democracy; in the urban regions popular election and the theory of rotation in office are slowly disappearing from the administrative hierarchy.

Historically the British administrative system has been decentralized and self-governmental. Throughout most of the nineteenth century the counties and boroughs performed services of local administration without intervention from Whitehall, although considerable responsibility for the management of poor relief had been transferred to government officials in 1834. The country gentry, in the guise of the justices of the peace, controlled rural administration until the end of the century; in the boroughs the modern system of representative councils and administrative committees was introduced in 1835 although with a limited franchise. The justices of the peace still share responsibility for police with the elected borough and county councils; but the process of central supervision and direction has gone far to create a national minimum standard of efficiency. In Great Britain the tendency is toward both centralization and professional administration.

The administrative system of the modern state is in fact tending to conform to certain general principles of organization, the effectiveness of which is being tested in business and military organization as well as civil administration. There is a strong tendency toward unity in the whole system, combined with the intent to concentrate responsibility in a single official. This has always been characteristic of the continental centralized systems, and the principle is now rapidly being recognized by American cities (strong mayor or city manager form), by the reorganized American commonwealths (Illinois, New York) and by the federal government through the notable development of the administrative powers of the president of the United States. The administrative organization of English boroughs is now the chief stronghold

of the contrary principle; there is some evidence that even here the need for unity is being felt, especially as new duties are heaped upon local government by act of Parliament.

Modern administration also gives wide expression to the principle of specialization. Rural systems remain an exception in part, but here also technical operations, such as highway construction and public sanitation, are deeply influenced by specialization. This principle involves not merely the progressive establishment of administrative units for different types of work organized by functions, but also the employment of experts of many kinds to perform the work. In large municipalities and in most national systems administration has become the work of the expert to a measure infrequently realized. The whole process of government needs to be reconsidered from the point of view of the expert, to determine the most effective means of utilization of his techniques.

This consideration raises the problem of the proper function of different types of administrative officials. It is obvious that the duties of a chief executive are not those of an accounting officer, and that the responsibilities of a junior clerk are different from those of a bureau chief. The most reasoned allocation of function is perhaps to be found in the British system. There a sharp distinction is drawn between the duties of the political and those of the permanent head of the department. The former is primarily concerned with the external contacts of the ministry, relations with ministries, with the cabinet, with Parliament and its committees, with the press, parties and the public. He is a buffer between the political and the administrative worlds; but also he has to keep his staff out of a rut and alert to the most advanced administrative methods.

The permanent head of the ministry is the official responsible for the organization, direction, supervision and management of the staff, acting always in harmony with the policy of the cabinet and of the minister. He also has to advise the minister on all matters of concern to the department, and often exerts the most powerful influence on the actual conduct of affairs. The contact between the political and permanent head is in the English system the effective contact between amateur and professional, between politician and expert.

A bureau chief has specialized and often highly technical duties to perform. The bureau (i.e. the primary subdivision of department or

ministry) is the fundamental unit of administrative organization, homogeneous, compact and specialized. Two types can readily be distinguished: those performing duties essential to the maintenance of the organization as organization (purchasing bureau, recruiting agency, disbursing officer) and those performing the operations for which the organization exists (detective bureau in a police department, income tax unit in treasury department). The former are termed institutional, the latter functional. In either case the bureau chief tends to be a highly specialized officer, intimately acquainted with the duties of his bureau. He is not concerned with policy further than to call to the attention of his superiors the need for legislation. His contacts are administrative and he looks within rather than without the administrative machine. In Great Britain special recruiting of officers of general administration (assistant secretaries, bureau chiefs, etc.) is deeply deplored by the professional-technical group, who are generally barred from this range of duties.

In lower levels the specialist is the dominant figure. American theory and practise tend to recruit the specialist already formed; English to recruit potential ability which (excepting the professions) is then trained within the service.

Simple administrative organisms which are adequate for rural or undeveloped communities do not present a difficult problem of coordination, but the complicated structures necessary to carry forward the activities of great cities or industrial states require elaborate machinery of coordination in order to prevent duplication, lost effort and internal friction. In the United States the most elaborate machinery developed for this purpose is found in the Bureau of the Budget, in the person of the chief coordinator and in a considerable number of coordinating committees. These committees, representative of the departments and independent establishments, lay down rules and understandings which govern administrative operations. The will to coordinate in the first instance was imposed by the director of the Bureau of the Budget; an unfortunate tradition of departmental autonomy was formerly unfavorable to voluntary cooperation.

In Great Britain coordination is secured chiefly through the oversight of the Treasury, partly by the operation of the Whitley Council for the civil service and partly by interdepartmental committees. The general extension of

the institutional services (purchasing, provision of quarters, recruiting, etc.) has also operated in the same direction.

Modern administration proceeds in fact on the basis of very highly specialized operations. Management has itself become a profession, touching all the sciences from chemistry and mechanics to psychology and medicine. It is employing lawyers and doctors, accountants and artists. Most of the professions play their role within public administration, and many occupations become highly specialized. The specialization is not merely in a set of procedures, but is even more a specialization in laws, rules and regulations, judicial decisions and customary practises which guide the official when he applies public policy to the particular case. Years of study and experience alone can form such a specialist.

A professional status has long been accorded responsible public administrators in European countries, and is eagerly sought by many groups intermediate in the official hierarchy. Such organizations as the Institute of Public Administration in Great Britain institutionalize this status. In the lower ranks of the public service, however, the tendency is rather toward the formation of trade unions, with normal trade union aspirations.

The trade union movement in the public service is an evolution substantially of the twentieth century, with roots in the postal service reaching down into the last decades of the nineteenth century. In Soviet Russia "civil servants" are a part of the general clerical trade union; elsewhere the public service is separately organized, with varying degrees of affiliation with the general labor movement. The fundamental issue which this novel situation presents concerns the part which organized masses of civil servants are destined to play in the administrative systems of the future. Syndicalist theory assigns them a dominant role, expecting them to maintain the esprit de corps and inventive capacity of the future by endowing them with autonomous responsibility for the conduct of the public services. The Joint Council for the Administrative and Legal Services of the British government already forecasts a type of employee cooperation which may become highly significant.

These councils, established both for the service as a whole and by departments, comprise equal numbers representing the official side and the staff side. They are empowered to

reach agreements on most phases of personnel management and have cooperated fruitfully in such matters as the reorganization of the service, reduction of expenditures, fixing the basis of pay, operating the promotion system and making provision for the further education of civil servants. Although harassed by internal dissension, their achievements are of first rate importance.

The maintenance of efficiency is a concern of primary importance to those officials responsible for the operation of the administrative machine. They must restrict entrance to the public service to candidates whose moral and intellectual fitness is assured, and watch every aspect of the whole employment situation to insure that their full potential capacity is developed and applied to the work of the state. The first task is usually vested in the hands of a civil service commission; the second is vested primarily in the higher officers of the several departments. Progressive leaders in employment policies in government and business agree that efficiency can only be secured by bringing into play every means to develop esprit de corps and morale.

Morale is both an index of a sound employment situation and a positive means of building an efficient organization. It reflects a social psychological situation, a state of mind in which men and women voluntarily seek to develop and apply their full powers to the task upon which they are engaged, by reason of the intellectual or moral satisfaction which they derive from their own self-realization, their achievements in their chosen field and their pride in the service.

In the absence of systematic and thoughtful attention to the esprit de corps of the public service, conditions develop which make it impossible for the state to capitalize the energy, inventive capacity and driving power which await the magic touch to bring them to life. A complex employment situation must be based, if efficiency is to be secured, on justice in the conditions of employment, on recognition for superior employees, on stimulation of leadership and personal and institutional loyalties, on agreeable social contacts and on effective personal adjustment to the job.

The scientific ascertainment of the means by which the necessary psychological environment can be built is one of the main tasks of research in the field of public administration and will call for the united efforts of psychologists,

psychiatrists, engineers, political scientists and sociologists. The actual achievement of an effective psychological environment need not wait for the discovery of its scientific foundations, for already skilful administrators are applying the art of administration to secure first class results.

Ultimately much more will be known as to the relative advantages of various psychological types for given categories of employment. By way of illustration, such a general classification as introversion-extraversion may serve as a preliminary basis for employment preference, the extraverts being directed into posts involving contacts with the public, the introverts being absorbed in office work. Standards of emotional stability are essential for the effective selection of policemen; and tests of honesty are already at hand to aid in protecting the integrity of public offices. Standards of intellectual ability need to be developed, so that the minimum necessary intelligence may be assumed, and so that the intellectually gifted may be quickly inducted into responsible positions, while the intellectually mediocre may be restricted to routine operations. The progressive refinement of these psychological bases of differentiation and their application in public offices are fundamental to high morale and efficient service.

THE CONTROL OF ADMINISTRATION. These broad considerations are fundamental to modern public administration. Specific consideration of administrative technique may be found in related articles. One important set of considerations remains, however, to be dealt with: the relations of public administration to the legislature and to the courts. These connections are partly formalized in constitutions and statutes and common law; they are partly customary and traditional, fluctuating from time to time as personalities shift and change.

Considering first the relations between legislatures (Congress and Parliament, state and provincial legislatures, city councils) and the administration, we may note that constitutionally the legislature is placed in a superior position as the ultimate representative of the sovereign people (except in such systems as now prevail in Spain, Italy and many colonial governments). In the modern democratic state, after a long constitutional struggle, the executive has been constitutionally subordinated; the administration now looks to the legislature for its organization and structure, its funds, its

tasks, often its methods; and it accounts to the legislature for its acts and expenditures. Legislatures have invented many devices to insure that this responsibility shall be a real one; yet one of the paradoxes of modern administration consists precisely in that the more the legislature strains to control administration, the less it succeeds. Fascist Italy has foregone the attempt; liberal England finds the task too great for systematic performance; but in France the parliamentary commissions perform their duties with such aggressiveness that the stability of the government is weakened.

It is clear that the task of legislative control has to be simplified and generalized to the utmost in order to make it tolerable. Administration has come to such a varied, extensive and technical state that no body of men deriving from a political environment, rapidly changing in personnel, meeting intermittently and absorbed with pressing issues of public policy, can expect to act effectively as a board of directors. Control to secure efficiency and economy is probably not at all an appropriate function of the legislature, but should derive from the internal organization of the administration itself.

The legislature does, however, have a legitimate function to perform *vis-à-vis* the administration. It may properly undertake to require the administration to operate within the limits of general legislative policy, to inquire into the propriety of expenditures and criticize the whole range of administrative operations, to insure that the administrative control is operating to secure efficiency and to inform itself thoroughly of the conditions of administration in view of remedial legislation.

There is much evidence that the constitutional role of the administration is in process of reconstruction. Legislatures are now faced with an almost superhuman task of dealing with a range of social problems, the intelligent solution of which depends less upon broad intuitions than upon masses of data from which conclusions emerge only by scientific treatment. In their solution the advice of administration is often the most significant that legislatures can call upon. Hence it results that legislative texts are frequently written by anonymous officials, sponsored by the executive and agreed to by the legislature. The latter become adjudicators of social policy rather than initiators.

The parliamentary system institutionalizes this process in large part, while in American

municipal government the tendency of city managers to suggest, formulate and guide the decisions of city councils parallels the movement in national circles elsewhere.

On a broader scale it has to be recognized in representative governments that administration, like legislation, must proceed on a basis of consent. The public enters as an influential party. It may strengthen or weaken administration from the jury box or at the polls (election of sheriff, prosecuting attorney). The special public concerned with particular phases of administration often secures a more definite recognition by assignment of its representatives to advisory boards or to responsible commissions (workmen's compensation commissions). Croly has pointed out that the most doubtful and difficult question connected with the administrative organization of a progressive democracy concerns its ability to obtain and keep public confidence. As administration extends its compass and refines its technique, the difficulty increases; but a healthy recognition of the underlying objectives of administration in terms of service goes far to maintain a proper balance.

The administration and the courts are in constant contact with each other, thus giving rise primarily to questions of administrative law. But considerations of efficient conduct of public affairs are also frequently engaged. Historically local courts have carried the brunt of local administration, as in Great Britain until the reform of local government in 1888 and 1894; even today the courts share responsibility for the British police system. In the United States the county courts of the southern states perpetuate this English inheritance.

Broadly speaking, however, the judicial system now stands as a controlling agency, holding the entire administrative system within the bounds of law and offering redress to those whose rights may have been infringed by official action. In Anglo-Saxon jurisdictions the ordinary courts perform this function; on the continent a separate series of administrative courts prevail.

The development of the regulating functions of administration, as well as the determination of the limits of official discretion, is governed by the views of courts concerning the proper limits of administrative action. In the United States diverse tendencies are at work, resulting on the whole in a recession of judicial interposition. This has developed in part by statu-

tory extension of official power, as in the enforcement provisions of the Eighteenth Amendment, in part by more tolerant attitudes on the part of the courts. In each case there is a better appreciation of the peculiar qualifications of administrative officials to deal with the diverse and delicate situations which modern government attempts to regulate. Courts are specialists in law and in Anglo-Saxon jurisdictions rely on precedent; officials are specialists in social situations and look toward the future rather than the past.

The courts retain ultimate power of control in most circumstances; and in cases of excess of power, failure to observe procedural requirements or abuse of power, will regularly intervene to protect individual right. A very significant tendency of the twentieth century is, however, the assumption of quasi-judicial powers by administrative commissions (utility commissions, compensation commissions, minimum wage commissions, valuation boards, etc.). Modern administration is based more and more on general legislative texts which presuppose that officials will define and redefine their content; it is thus freed from the necessity of observing the detailed requirements which were formerly imposed by statute, and the occasion for judicial interference has thereby been lessened.

TRENDS. The underlying trends of modern administration are not always easy to segregate and define. Some, however, seem reasonably clear. There is yet no conclusion to the growth of administrative functions, although there has been a recession from the abnormal situation induced by the war and a general slowing down of the expansion of function by reason of financial stringency. The intensity of administration, a factor unrelated to extent, increases year by year and may be expected to develop gradually for an indefinite period. The scope and intensity of public administration are both functions of a prevailing socialized philosophy of government which seems to be characteristic of such widely diversified systems as the American and Russian, the British and the Italian.

As these trends move on from decade to decade, they emphasize the decline of the amateur and the dominance of the expert. The amateur administrator long ago lost his hold on the national services and is disappearing in the larger local services as well. The reform of English local government in the last decade of

the nineteenth century, the establishment of the American city manager plan in the twentieth, are indications of a continuing process by which specialization, permanence and professionalism are conquering the public service. From another point of view this marks the transition from self-governmental institutions to bureaucracy.

The center of gravity of modern administration is moving from periphery to center. This shift is rendered feasible by technological improvements in communication and transportation, and is rendered wise by virtue of savings in outlay and expenditure, by improvement in many specialized forms of public service (institutional care of insane, defectives and delinquents) and by greater ease in supervision and control. Certain phases of administration remain localized and by their nature would seem likely to continue so; for instance, family care, mothers' pensions, recreation in large part, baths, protection of person and property. Here, however, as elsewhere, the case for central agencies giving thought to administration seems unimpeachable. Lord Haldane's brilliant suggestion for a Minister of Research and Information remains to be made effective, but the Privy Council Committee on Research and in America such semi-official agencies as the National Research Council and the Social Science Research Council are distinct indications of possible developments.

In America, especially, there has emerged in recent years a pronounced tendency to enhance the administrative power of chief executives, including the president, governors, mayors and managers. Two types of executives are competing for supremacy, the political and the professional, and it is much too early to indicate which will prevail. Whichever ultimately predominates, it is safe to conclude that the integrity of a professionalized service will be assured.

Following the war came a distinct tendency to modify the autocratic management of personal relations within the public service. The democratization of business had its repercussions in government, most notably in Russia, but also in a significant manner in Great Britain. Reaction soon overtook the hopeful surge of feeling which succeeded the armistice, and it is unlikely that democratic or radical theory will introduce any marked innovations in the practises of personnel management.

There is, nevertheless, a decided tendency in

continental systems to grant a jurisdictional protection to rights of employment, which are less extensive in Great Britain and uncommon in the United States. This takes the form of an administrative appeal from official decisions by employees whose interests have been injured. In America public employees are in this respect more nearly on the footing of industrial employees.

LEONARD D. WHITE

See: GOVERNMENT; MUNICIPAL GOVERNMENT; ADMINISTRATIVE LAW; COURTS, ADMINISTRATIVE; ADMINISTRATIVE AREAS; REGIONALISM; COMMISSIONS; BOARDS, ADMINISTRATIVE; ADVISORY BOARDS; JUDICIAL REVIEW; EXECUTIVE; CIVIL SERVICE; PUBLIC EMPLOYMENT; PERSONNEL MANAGEMENT; APPOINTMENTS; ACCOUNTS, PUBLIC; FINANCIAL ADMINISTRATION; BUDGET; REVENUES, PUBLIC; EXPENDITURES, PUBLIC; TAX ADMINISTRATION; PUBLIC FINANCE; BUREAUCRACY; CENTRALIZATION; EXPERT; ORGANIZATION, ADMINISTRATIVE.

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ADMINISTRATIVE AREAS. Administrative activity is as old as government itself. Greek, Roman and mediaeval analogies offer instructive comparisons to the modern administrator. The emergence of a separate function or machinery of administration, however, is a product very largely of the nineteenth century. The new tasks thrust upon or assumed by government as a result of the new conceptions and broader requirements of communication, education, public health and public welfare hastened the process of political reorganization and functional differentiation which marked the progress of the industrial revolution. A comparison of the effects of this process upon administrative areas and their proliferation in the larger states will indicate its general outlines.

In the United States the federal government has developed its relatively few administrative districts—treasury, judicial, customs, federal reserve, etc.—without interfering with state boundaries. The states, which have complete constitutional control over their own territory, have, on the other hand, elaborated a great variety and complexity of areas. The traditional

subdivisions of the state are the county and, for local government, the town (New England) or township (south, middle and west). There are over 3000 counties in the country, varying greatly in size (25 to 30,000 square miles) and population (65 to over 3,000,000). "The typical county may be said to have an area of 600 square miles and 20,000 population" (Dodd, p. 348).

The disparity between the traditional county boundaries and a realistic remapping of administration in accord with the shifting of population and rapid urbanization which has taken place all over the country has led to two expedients: the setting up of new areas for new functions, and the sanction of county unions for special and limited purposes.

Practically every state has for its own purposes types of administrative areas—fiscal, electoral, judicial, park, public health, police, road, education, conservation, etc.—which overlap the county division or disregard it altogether. In addition to these are the many local areas and metropolitan districts which have grown up during the last century. Only a few states, on the other hand, have, hesitatingly enough, allowed counties to cooperate, under home rule or county manager charters or by special legislation, for joint administration of such services as roads and hospitals. The reorganization of state administrative areas on a logical plan has received very much less support in practise than it has in project (see Governor Smith's Messages, Albany, New York, Jan. 5, 1927; Jan. 4, 1928).

Local administrative areas have gone through the same process of dissection at the hands of the states. Not only have they been chopped up into various unrelated and often conflicting areas for special purposes—for example, schools, roads, parks, water, drainage—but the rapid growth of cities has added confusion to the existing puzzle map. Various plans have been tried to overcome the anomalies of anachronistic political boundaries: the merging of city-county areas and functions, the erection of an expanding city into an independent county, the limited control by the city over adjacent territory, the federation of cities for special purposes, the creation of metropolitan districts, the consolidation of urban areas with local autonomy for limited purposes, or the complete unification of such areas (Dodd, Maxey). Meanwhile state boundaries have offered similar obstacles to efficient administration of newer

regional activities such as flood control or power development. Numerous interstate "compacts" have been sanctioned by Congress, the most notable of which is that creating the Port of New York Authority (Frankfurter).

The great acts reforming local government in England began with the Poor Law Amendment Act and the Municipal Corporations Act of 1835. For a half century afterwards the same process as in America of creating *ad hoc* areas for special purposes resulted in the same "chaos of areas, of authorities and of rates." Consolidation of areas began with the Public Health Act of 1875 and has continued to the present; the Act of 1929 removed the last serious anomaly by the complete transfer of poor law functions from some 640 old poor law unions to the 142 counties and county boroughs.

The present administrative areas of England are as follows: administrative counties, 62; county boroughs (large cities), 82; metropolitan boroughs (old crown charters), 253; urban districts, 782; rural districts, 602; parishes, 14,300. Many joint authorities have been set up under permissive acts, such as those for roads, town planning and electricity supply. Central control is for the most part consolidated in the Ministry of Health, thereby insuring responsibility to Parliament. This ministry succeeded the Poor Law Commissioners (established in 1834), the Poor Law Board (1847), the Board of Health (1848) and the Local Government Board (1871).

In contrast to the American, and in large measure to the English, theory of local administration, France, Germany, Italy and Japan have highly centralized systems of national control. The details of the hierarchy of districts vary in the different countries. Germany has 18 states, each divided into separate groups of districts, Prussia, for example, being composed of provinces, administrative districts, counties (urban and rural), cities, rural communes and manors. France has 90 departments, 279 arrondissements, 3019 cantons, 37,981 communes (of which over 22,000 have a population of less than 500). In these and other centralized countries the focussing of control at the political center follows naturally from the fact that it is the center of gravity of the administrative system; in England and the United States central control has been elaborated at the expense, and often in the face, of the persisting tenacity of local loyalties.

The growth in the range of international

administration has already created what may be termed international administrative areas. Tangier, the sanitary councils, the river commissions, etc., are pre-war examples, while the direct territorial responsibilities of the League of Nations (Danzig and the Saar Valley), its work in Greece (exchange of populations), in Austria and Hungary (finance), in Poland (health) and the mandates are indications of a great future expansion in this field (Sayre).

The real problems arising from the increase in administrative areas result from the "lag" in the changing of boundaries to meet the facts of human migration and shifts in economic activity. Differences in size, population and taxable capacity between different areas subject to similar responsibility create intolerable situations which are still further accentuated by changes in wealth and population and by differences in the political institutions of different countries. Moreover, as administration is a function of locality, its form and technique must change with the locality. As locality is a function of space, so is space a function of time; with the profound changes in the speed and ease of communication in the past century, the whole problem of administration has been modified and the area of effective control broadened.

Various plans for reorganization have been suggested. Their variety and ingenuity may be indicated by a reference to the Webbs' scheme for the "cellular" organization of England, "county boroughism" (Finer, "Neue Entwicklungstendenzen"), the "regionalist" movement in France (Brun, Hennessy), and the regional planning and power projects in the United States.

Others have suggested more fundamental reform by striking at the root of the separation of economic and political interests. The Soviet and Fascist states, the German Economic Council (Finer, *Representative Government and a Parliament of Industry*), the guild socialist and other programs (Cole and Laski) are protests of this sort. A functional organization of administration appears to offer great difficulties, although its benefits would be real and are perhaps essential to any final solution of the problem of administrative areas. Meanwhile it is becoming evident in practise that with the increasing mobility of man and his products the area of administration must enlarge. In the words of the Webbs, there must be "aggregation to secure segregation."

PHILLIPS BRADLEY

See: ADMINISTRATION, PUBLIC; ORGANIZATION, AD-

MINISTRATIVE; LOCAL GOVERNMENT; MUNICIPAL GOVERNMENT; COUNTY, UNITED STATES; INTERNATIONAL ORGANIZATION; BOUNDARIES; CENTRALIZATION; URBANIZATION; COUNTY-CITY CONSOLIDATION; COM-PACTS, INTERSTATE; METROPOLITAN AREAS; HOME RULE; REGIONAL PLANNING; REGIONALISM; GUILD SOCIALISM; ECONOMIC COUNCILS.

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ADMINISTRATIVE BOARDS. *See* BOARDS, ADMINISTRATIVE.

ADMINISTRATIVE COMMISSIONS. *See* COMMISSIONS.

ADMINISTRATIVE COURTS. *See* COURTS, ADMINISTRATIVE.

ADMINISTRATIVE LAW.

Administrative Law on the Continent of Europe. The central idea of administrative law in French and German jurisprudence is the differentiation of civil and criminal justice from other functions of government. For the adjudication of controversies between private persons and for the punishment of crimes there exist courts which are surrounded by constitutional guaranties of independence; but the executive power is not, in principle, subject to their jurisdiction. Inevitably, however, the

exercise of governmental powers in matters of police, revenue and public services will, by reason of the silence or the ambiguity of statutory texts or by reason of disputed facts, give rise to controversies; and unless private parties are to be subjected to an unregulated official discretion, there must be devised orderly processes, as part of the executive power, for the determination of these controversies, and these in their turn will produce principles analogous to those administered or evolved by the ordinary courts.

This body of law, controlling the exercise of governmental power outside of traditional civil and criminal justice, is designated as administrative law. It covers both regulative legislation and its interpretation, and the inherent principles of official power. The exclusion of the jurisdiction of the ordinary courts leads to a demand for a substitute; and in France and many other continental states special administrative courts have been established. The development of a theory of administrative law is greatly stimulated by a distinct organ of jurisprudence and by the necessity of marking off the jurisdiction of administrative from that of ordinary tribunals. Administrative law has thus become on the continent of Europe a major department of legal science, and has accordingly a status equal to that of civil and criminal law.

Administrative and Judicial Powers in the Anglo-American System. Under the common law of England, received in America, the jurisdiction of the regular courts over controversies involving the validity of official acts, with power to grant relief against organs of the administration, was never lost. Moreover, where legislation had to operate through official powers over individuals of a compulsory or determinative nature, such powers were apt to be vested in courts (in England locally in the justices of the peace) and not in administrative officers. The old common law executive officer, the sheriff, was a ministerial officer of the king's court. England and the American state governments lacked the bureaucratic organization characteristic of the continental monarchical systems as the latter developed during the seventeenth and eighteenth centuries. It is true that in America the organization of local governments separated administrative from judicial functions, and the important power to grant licenses for the sale of intoxicating liquors, which was in England vested in the

justices of the peace, was in most American states exercised by local administrative authorities; and questions in connection with this licensing power compelled the courts to consider the problem of administrative discretion. But administrative orders were not a conspicuous part of the machinery of government, and on the whole administrative law, as we know it now, until the later part of the nineteenth century remained undeveloped, and the term meant nothing to the legal profession. Among jurists there was a tendency to regard it as something foreign to the common law, and Professor A. V. Dicey in his *Introduction to the Study of the Law of the Constitution* (8th ed. London 1915) contrasted the *droit administratif* of France with the "rule of law" in England. The great treatises of the German Professor Gneist on English administrative law apparently received little, if any, attention in England. In America there were well known treatises on the law of officers, the law of municipal corporations and the law of extraordinary legal remedies; but to the present day the term "administrative law" is not to be found in legal digests and is uncommon in judicial decisions.

The Rise of American Administrative Law. As a subject of instruction administrative law obtained a status in university departments of government or political science before it gained a foothold in law schools. Political science teachers emphasized problems of organization (Goodnow, *Comparative Administrative Law*), and the more purely legal aspects of powers and remedies did not become dominant until professional law schools gave the subject a place in the curriculum, which was done only very slowly. Even today it does not occupy the same position as constitutional law. The scientific study of the subject received a new stimulus when the Commonwealth Fund in New York placed it among the research topics to be systematically pursued and subsidized.

In America the awakening of the legal profession to problems of administrative law is associated with the regulation of public utilities, operating through commissions vested with power to issue orders. It was only after the beginning of the present century that this branch of the law was really developed. In the sixties of the nineteenth century a similar order-issuing power had been given to the Metropolitan Board of Health of the county of New York, and its constitutionality, questioned by

lawyers, had been sustained by the courts. The novelty was that a power such as traditionally under the common law system had belonged only to courts of justice was to be exercised administratively by organs of the government not hedged in by the old established checks of judicial processes, i.e. not proceeding "according to the course of the common law." Was this "due process"? The familiar licensing (as opposed to order-issuing or directing) power had presented no similar problem, for according to its nature it tended to be exercised in a routine fashion, and on the whole the interests subject to it found it easily possible to accommodate themselves to its exercise. An administrative order according to its nature is not quite a routine matter; it places itself in opposition to the independent conduct of business; and hence the authority issuing it tends to assume the character of a tribunal and appears to represent a method of law competing with the common law.

As an instrument of legislative policy this method of controlling private interests became conspicuous through the Interstate Commerce Act of 1887. This act operated with terms ("unreasonable," etc.) practically unenforceable without administrative determinations prior to judicial enforcement, and the making of these determinations was entrusted to the Interstate Commerce Commission, an "independent agency in the executive branch of the government" (to use a term more recently introduced into the language of Congress), i.e. not a court of justice but a body whose members were made removable by the president. While the next act of congressional economic legislation, the Sherman Anti-Trust Act of 1890, was a purely penal measure without administrative determinations, Congress, in 1914, by the Federal Trade Commission and the Clayton Acts, and by the Shipping Board Act of 1916, again utilized administrative commissions; and although in 1920 the Packers Act entrusted analogous functions to the secretary of agriculture, the commission vested with determinative powers had become established as an important organ of law administration. The copying of the model of the Interstate Commerce Act in the public utility laws of the states made the method familiar to the entire American legal profession, and administrative law became a recognized branch of the legal system.

The state public utility laws operate through licenses and certificates as well as through orders; and important licensing powers (new

construction, security issues, etc.) were given to the Interstate Commerce Commission in 1920. License or permit requirements were also the traditional method of the legislative regulation of such classes of business as banking, insurance, the liquor traffic, etc. As before stated, the tendency of this form of power to become a routine function had prevented it from becoming a nucleus for the growth of administrative law. Under the Transportation Act of 1920, however, the requirement of notice and hearing as a condition precedent to the issuing of permits promises to invest this type of function likewise with a quasi-judicial character, and to raise in connection with its exercise important questions involving private right, administrative power and judicial control.

Sources and Problems of Administrative Law. If we describe administrative law as the law of official power and of its subjection to judicial control, we also indicate its two principal phases and aspects. On the one hand the law is concerned with statutory provisions and their construction; on the other hand, with common law principles of remedial law (official liability, extraordinary legal remedies, equitable jurisdiction). But common law also enters into statutory construction, and legislation is controlled by the constitutional principle of due process to which the exercise of power over private rights must conform. It is neither necessary nor profitable to determine how much of administrative law rests on legislative, and how much on judicial, action.

The main problems of administrative law relate to the nature and operation of official powers (permits and orders, ministerial and discretionary, scope of discretion and legitimacy of underlying considerations), the formal and procedural conditions for the exercise of powers, official and communal liability, the specific remedies for the judicial control of administrative action (legal, equitable and statutory), jurisdictional limitations of powers and the question of administrative finality.

The constitutional problems of administrative law relate to the delegability of legislative power, due process in administrative power and due process as involving subjection of administrative power to judicial control. Where the course of administration is in accordance with traditional methods, it is generally assumed that it is not contrary to constitutional limitations or requirements (summary powers,

finality of discretion, absence of common law remedies such as the non-suability of the sovereign). On the other hand common law principles generally work out in such a way that fundamental requirements of justice are respected and operative. Thus if the administrative process in itself falls short of what due process may seem to demand, the application of common law remedies (mandamus, official liability, etc.) by way of correcting the administrative process may supply the defect.

The judicial development of administrative law proceeds mainly through a gradual liberalization of the two remedies respectively applicable to permits and orders, namely mandamus and certiorari; but the courts cannot remedy every defect of the common law, and particularly the harsh operation of official liability cannot be relieved without corresponding hardship to private rights. With regard to this last matter adequate relief may depend upon the legislative substitution of the corporate liability of municipal or state government. The legislature may also do much in the way of simplifying the common law system of remedies, which is perhaps unduly encumbered with technicality, and it may give added protection to private right by throwing safeguards around the administrative process itself, both by circumscribing the substance of discretion and by prescribing appropriate forms for its exercise. In these respects the development of regulative legislation has incidentally brought in its wake also a development of administrative law.

The Law of Administrative Practise. So far as the statutes are silent and are not aided by well-established rules of construction or of the common law, administrative authorities must themselves determine in the first instance how they will exercise their powers; and the practises which they observe will control private interests except as they may be checked or overruled by successful appeal to the courts. Administrative practise will thus always have an important place in the actual functioning of government. Voluntary and long continued administrative practise has many of the characteristics of law and, under favorable conditions, inherent guaranties of fairness may approach those which are generally associated with courts of justice. We are inclined to accord to the courts a law creating monopoly, and administrative law is to us primarily judicial law controlling the administration. The term

might, however, also be applied to a body of principles produced by the administration; and with the growth of administrative tribunals, and particularly of a practise of publishing reports of administrative decisions and of abiding by precedents, there is every reason to suppose that such a body of commission or departmental administrative law will gradually establish itself.

The quality of such administrative law as the administration itself may produce will greatly depend upon the character of its organization. In the modern constitutional state this organization is in the main fixed by written law, and the principles which guide this organizing legislation are also legitimately designated as administrative law; French and German and American writings on the subject are perhaps primarily given to the discussion of organization. There is now, however, a tendency to differentiate the study of organization and the study of powers. The former, involving public administration, aims to discover the conditions reconciling efficiency and economy with avoidance of the drawbacks of bureaucracy. The latter, involving the principles making for the protection of right and justice, is viewed as the more strictly legal discipline of administrative law, using the narrower sense of the term.

Law Enforcement. There remains a further important aspect of administration which is concerned with law enforcement. The process of enforcement is to such an extent dominated by the courts, and also so closely associated with criminal or penal justice, that it seems to fall almost outside of the province of administration, considered as a branch of government distinct from the judiciary. Yet the initial and the final stages of enforcement—prosecution and execution—are entrusted to organs of government which, while closely allied to the courts, are technically part of the executive government. A complete view of the field must not fail to take account of the important problems connected with the organization and action of administrative enforcing powers; but in the United States at least that aspect of administrative law has not so far received adequate systematic treatment.

ERNST FREUND

See: PUBLIC LAW; JURISPRUDENCE; ADMINISTRATION, PUBLIC; COURTS, ADMINISTRATIVE; BOARDS, ADMINISTRATIVE; COMMISSIONS; JUDICIAL REVIEW; RULE OF LAW; DELEGATION OF POWERS; SEPARATION OF POWERS; STATE LIABILITY; REMEDIES, LEGAL; WRITS, LEGAL.

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ADMINISTRATIVE ORGANIZATION.

See ORGANIZATION, ADMINISTRATIVE.

ADMIRALTY. See MARITIME LAW.

ADOLESCENCE literally means growth, but as the term is used in biology and psychology it defines the period of human development from the beginning of puberty to the end of the maturation process. Its physiological characteristics are now well understood. Its chronological boundaries vary with race, climate, nutrition, social status and inheritance, and may include some individuals as young as eight and others as old as twenty-five. The status of an age group in society may be determined by studying, first, the scientific knowledge available concerning its physical and mental development; second, its position in the laws regulating social relationships, duties, immunities and privileges; third, its participation in social and economic activities and the problems resulting from the degree of adjustment or maladjustment; fourth, the moral and religious ideas that evolve concerning its conduct and status.

Thus infancy has been studied. In the pre-

natal period weight increases almost a billion-fold, in all the years after birth only about twentyfold. Most of the growth momentum, according to Minot, is lost at the time of birth (98 percent). The physical and mental progress of the first three years of life is in this sense infinitely greater than from six to nine or from puberty until twenty-one years. The significance of the growth rate in the life of the individual cannot, it appears, be stated accurately in terms useful for education, but there is a growing conviction that the period of infancy and childhood should be surrounded by special immunities and protection, and that its prolongation has significance for the more complete higher evolution of human beings. The status of the child in a given society is therefore held to be an index of social well-being. Undoubtedly the scientific study of child life has had a profound effect upon our modern social organization.

To set forth the position and the influence of the adolescent is a more difficult matter. Physically and mentally the normal adolescent is capable of approximating the adult role, as he frequently does among primitive peoples and pioneer groups. The adolescent can win his bread, produce offspring, fight and participate in social and religious activities. His immaturity comes to light in the more subtle phases of social life. He appears to be an adult yet he is not, and both primitive and civilized peoples have denied him complete political participation and have extended to adolescence some degree of immunity from adult legal and social responsibilities. Scientific evidence to support this "common sense" policy is vague because of a lack of systematic research into the norms of adolescent development. A scientific description of the normal adolescent in society remains to be written.

A study of adolescence has passed through four phases: first, interest in problems of physical growth and anthropometric measurements, which has resulted in the concept of physiological age; second, interest of the psychologist in individual differences and progressive development, leading to the concept of psychological age; third, the interpretation of these findings in terms of evolution, the "recapitulation theory," and the doctrine of adolescence as a "storm and stress" period; fourth, the definition of the problems of the adolescent in terms of the social situation.

Pioneers in the physiology and anthro-

pometry of adolescence were L. A. J. Quételet in Belgium (*Sur l'homme et le développement de ses facultés* in 1835, and *L'anthropométrie, ou mesure des différentes facultés de l'homme* in 1871); in Germany, K. von Vierordt (*Physiologie des Kinderalters* in 1877) and H. Vierordt (*Anatomische, physiologische und physikalische Daten und Tabellen zum Gebrauche für Mediciner* in 1888); H. R. Malling Hansen in Denmark (*Perioden im Gewicht der Kinder* in 1886); Charles Roberts in England (*Manual of Anthropometry* in 1878); N. Wiazemsky in Russia (1907); and Franz Boas, W. T. Porter, F. D. Burk, H. P. Bowditch and C. W. Peckham in America. G. Stanley Hall summarized these in *Adolescence*, a monumental work with extended interpretations as to phylogenetic and pedagogic significances. The most complete summary and analysis of physical growth studies was made by B. T. Baldwin, utilizing 5,385,400 recorded cases from all available sources in various countries. He found that oscillations in growth, in height and in weight occur before puberty. There is retardation in growth at the end of the pre-school period, a slight acceleration at about seven for girls and eight for boys, a marked decrease in the yearly percentile increment for girls at nine and boys at eleven, followed by the adolescent growth spurt which in boys culminates at the average age of fifteen and in girls from twelve and a half to thirteen years. The greatest mean variations in growth rate for both sexes are found during the characteristic adolescent ages for each. In a typical American rural community the pre-pubescent boys ranged in age from eight and a half to sixteen years, the pubescent boys from nine and a half to fifteen and a half years, the post-pubescent stage from eleven and a half to twenty-four years. In an analogous city group of boys the pre-pubescent ages were nine and a half to seventeen and a half, the pubescent ten to eighteen and the post-pubescent from twelve and a half to twenty-four years. The age of first menstruation for normal American girls ranges from ten to seventeen. Thus any study of the adolescent in society is complicated by its tremendous range.

Throughout the adolescent period there is acceleration in height, weight, breathing capacity and strength traits, with profound modifications of bodily organisms. Pubertal growth affects more or less simultaneously every part of the body, but not in equal ratio; for example, the muscles, the heart and the reproductive organs increase with great rapidity, the brain

hardly at all. Early puberty is followed as a rule by rapid cessation of growth in stature, although physiological processes of maturation may continue until the middle twenties. Growth statistics are of value for comparative study of masses of children in relation to age, sex, race and environment, but the growth status of an individual child cannot be evaluated from a study of growth averages, and therefore these early scattered investigations without uniform procedure or continuity have slight value for an understanding of the processes of normal physical development.

The experimental study of children of the pre-school age has been carried on by Baldwin in the University of Iowa and by Gesell in Yale, resulting in the establishment of norms of physical and psychological growth. Nothing of like nature exists for the adolescent. Helen Thompson Woolley in 1915 undertook in Cincinnati, Ohio, a study of 5483 adolescents from fourteen to eighteen, divided into two groups, at work and in school. Physical and mental tests were given to the same children each year for five years. The study was restricted to native born white children. For the first time in history records were kept of the physical and mental status of representative adolescents from year to year, their school or industrial histories, home conditions and where possible their social histories. The results of this study more nearly represent the situation in the community at large than any other ever undertaken with reference to adolescents. Formerly scales of mental development for adolescents were based almost entirely upon the selected group that remained in school. (Lodor, however, had previously studied the girl in the continuation school, and Leaming had developed tests and norms for vocational guidance at the fifteen year performance level. These studies compared school and work groups.)

The Cincinnati study included measurements in height, weight, vital capacity, strength of hand, steadiness, rapidity, eye-hand coordination, and a wide range of standard mental tests involving memory, perception, recognition, association, abstraction, reasoning, space perception, mechanical ingenuity. Comparison of working children with school children showed that in both physical and mental scales the latter are superior at every age level from fourteen to eighteen years. There is some evidence that mental growth continues to a greater age in the case of school children than among working

children. However, the information given by this study as to the laws of yearly growth in the mental development of adolescents is far from conclusive. The rate of growth, both physical and mental, is related to the various factors of age, sex, home background, degree of ability and type of measurements.

In fundamental physical capacities girls complete their period of rapid growth by fifteen or sixteen and gain very little after seventeen, thus reaching a status which is approximately that of the adult from one to two years earlier than boys. In mental growth no such sex difference appears. Boys and girls are closely comparable in their yearly gains in the few tests for which we have records. At present we have no data which set a limit in years to mental development for either sex, although the rather meager data from surveys of group mental tests incline some observers to think that average mental growth ceases at about fourteen or fifteen (Toops, Pintner, Ballard). The Woolley results indicate that improvement goes on up to sixteen or seventeen years. That social conditions play a part is evident. "It is a striking fact that the differences of home background, in these extreme cases, can not only counteract differences in mental ability, but can give to inferior children an advantage of three years in educational progress by the age of fourteen years" (Woolley, *An Experimental Study of Children*, p. 541). Degree of ability also conditions mental growth after sixteen; superior children tend to continue in mental progress longer than the inferior.

Although the concept of psychological age has been valuable in the field of education it has thrown little light upon the problem of the adolescent in society. The earlier writers, while noting that the death rate is comparatively lowest at this period, that growth abnormalities tend to diminish at puberty and that infectious disease is relatively rare, described adolescence as a period of marked instability and maladjustment. The dramatic appearance of puberty suggested that it was a new birth in which the higher human traits emerged. The disproportionate rate of growth of bones, muscles, various organs and glands suggested a corresponding mental and emotional disharmony, involving special dangers. In accordance with the doctrine of recapitulation, the adolescent was regarded as "neo-atavistic, prone to storm and stress," with "ancestral prepotencies struggling with each other for predominance." G. Stanley

Hall and his students circulated thousands of questionnaires on the subject of adolescent interests, diet, imagination, day dreams, recreation, love life, religious conversion and special abilities. Biographies of great men and women were studied and characteristics of their youth noted. From the studies Hall listed ten specific characteristics of puberty: first, inner absorption and reverie, "a double housekeeping of consciousness"; second, birth of the imagination, frequency of illusions, dreams, visions; third, self-criticism, skepticism and scruples; fourth, over-assertion of individuality; fifth, imitation at its acme; sixth, dramatic role at its height, poses, affectations, mannerisms; seventh, folly, absurdities, freakishness; eighth, new speech consciousness; ninth, absorption in friendship; tenth, impairment of orientation in time and place, intense fluctuations in energy, great emotional and intellectual plasticity. In summary, "we must regard the adolescent stage as especially characterized by . . . a loosening of the bonds between the manifold factors of our ego, somatic and psychic" (Hall, *op. cit.*, vol. i, p. 241). Thus the manifestations of adolescence were likened to the symptoms of hysteria and insanity. The recorded cases of religious fanatics are "adolescents in whom the tendencies and characteristics normal to this age are here seen only in persistent or exaggerated forms" (*ibid.*, vol. i, p. 266).

A more recent phase in the study of adolescence is the emphasis on its social aspect. The literature of the child guidance clinics and juvenile court studies points out that maladjustment occurs frequently in infancy and early childhood and is not more characteristic of adolescence than other periods. Where maladjustment is pronounced in the healthy adolescent it is now thought to be due to the social situation. W. I. Thomas gives evidence that when social norms and structures evolve more slowly than activities and inventions the result is a stage of disorganization, apparent alike in personalities and in society. When old habits are no longer adequate they break down, and before new habits are learned there is instability. Thus in the twentieth century youth appears to be in conflict with the standards of behavior in home, school, church and community. To add to the confusion, the dress, habits, activities and mood of youth are copied by adults so that the value of youth appears to have an exaggerated significance in social life, and the young have few recognized goals of

maturity to follow. At present infants and pre-school and school children are better cared for than in the past with reference to scientific programs of diet, sleep, exercise, physical safety and "chaperonage," while the adolescent is prematurely exposed to self-regulation.

More direct evidence that adolescence in itself is not a period involving special adjustment comes from the study of primitive youth, particularly that undertaken by Margaret Mead. The difficulties which we have ascribed to fundamental human traits are apparently nonexistent among such a group as the Samoans. Civilization imposes restraints on the one hand, and increased stimulation on the other. There is absolutely no evidence that the conflicts and difficulties of adolescence are inevitable. The behavior of adolescents in modern society, the symptoms of unrest and maladjustment, are no proof that these are normal characteristics of the age group.

Primitive peoples have often paid marked attention to the appearance of puberty in girls and boys and have endeavored through physical mutilations, ordeals, fasting, initiation, festivity, seclusion and instruction to mark it as an important threshold of life. Ceremonials of some sort are found in Africa, Asia, Indonesia, Australia, Polynesia, North America and South America. There are also groups of primitive peoples in the same areas who pay no attention to puberty. A systematic account of social activities among these peoples affords very little insight into the actual life of the individual. The picture is too standardized. How a given personality reacts to the prevailing culture is a matter for further research. The framework of primitive society appears to some observers to stereotype the youthful individual by powerful institutional devices which prevent him from self-expression. The anthropologist doubts the correctness of this assumption. Wherever a primitive culture has been studied intensively by one who knows the language and can penetrate into the life and feeling of the group, it is evident that the primitive treatment of adolescence takes account of the individuality of the adolescent and his need for independence. The new social status is seen in a variety of ways: change of dwelling, entrance into youth societies, ordeals, tests of personal skill and endurance, acquisition of a guardian spirit, the importance conceded to adolescent dreams and visions, separation from the family group, disappearance from home into forest or desert,

initiation into sexual life, freedom from childhood restraints, use of decorations, mutilations, serve as symbols of the enlarged status. The assimilation of the adolescent into the life of the primitive group is equally stressed by means of various modes of sexual, physical, social and spiritual initiation which tend toward the general phenomena of social symbiosis (Van Waters, *The Adolescent Girl among Primitive Peoples*, vol. ii, p. 90-91).

The more recent standards of adolescent conduct are difficult of scientific description. Programs of child welfare have been largely of extra-academic origin. It is not the scientist who has been directly confronted with problems of personal and social demoralization, but the parent, educator and social worker. The psychologist and sociologist have concerned themselves not with the difficulties the child makes but with the difficulties the child has. This has profoundly altered the method of approach.

Recent neurological studies have indicated that maturation is a subtle process, extending long after gross size and weight have been attained. Lawyers have recognized this and have hesitated to allow young persons the full management of large estates until they have reached the age of about twenty-five years. Legislation has lagged behind in matters of criminal responsibility, so that we see youthful individuals of fourteen, sixteen or eighteen held completely responsible for their deeds. Strict proof is lacking, but all studies seem to indicate that the integration of the nervous system is not complete until the middle twenties, whereas the conventional view that youth is mature at the time of political majority (twenty-one) prevails to the detriment of the individual adolescent. What we call wisdom and discretion are certainly not to be expected of the normal adolescent in his 'teens.

Among European and American civilized peoples the age of compulsory education has been extended to sixteen or eighteen. The state has definitely undertaken the academic and vocational guidance of adolescents. Youth is now definitely interested in programs of social betterment, war and peace, economic equality and democracy. The social situation is complicated, but youth remains the same—a period of life when physical and mental energy is at its height, when charm dominates, and the adult role is eagerly anticipated, yet when complete social participation is impossible because of fundamental biological immaturity.

As long as our social situation is somewhat pathological, youth will remain in conflict with prevailing social standards.

MIRIAM VAN WATERS

See: CHILD PSYCHOLOGY; MENTAL HYGIENE; INTELLIGENCE; CHARACTER; PERSONALITY; MENTAL TESTS; INITIATION; SECRET SOCIETIES; YOUTH MOVEMENT; SEX EDUCATION; VOCATIONAL GUIDANCE; CONTINUATION SCHOOLS; PARENTAL EDUCATION; CHILD WELFARE; CHILDREN, LEGISLATION FOR PROTECTION OF; CHILD MARRIAGE; CHILD LABOR; DELINQUENCY; CHILD, DELINQUENT; JUVENILE COURTS.

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ADOPTION.

PRIMITIVE. Adoption is the legal fiction by which an individual belonging by birth to a certain kinship group acquires novel relationships that are reckoned as equivalent to congenital ones and either wholly or partly supersede the old ties.

Primitive conditions sometimes foster wholesale adoption of children. When a mother dies in childbed, the surviving infant must die of starvation unless a tribeswoman able to give suck is willing to adopt it. If there are no such women, the child is usually buried with the mother. At a later age a child may be easily orphaned by a war raid or the dangers incident to daily economic pursuits. Frequently the adopters are close relatives, such as uncles and aunts, but this is by no means essential. Among Plains Indian tribes a stranger who has lost a child bearing a real or fancied resemblance to the orphan may feel prompted to adopt it as a substitute. Other motives enter. Thus, where the concept of property is well devel-

oped, as among some of the reindeer herding Siberians, a childless man of wealth may find intolerable the thought of having his wealth dissipated and will accordingly take pains to find an heir.

In some regions of the globe, however, adoption is practised on a scale wholly disproportionate to any rational grounds therefor. In one of the islands of the Eastern Torres Straits group, children are adopted even before birth and brought up entirely in the family of the adoptive parent; often they never learn their real parents' identity. In the Banks Islands (Melanesia) similar customs hold sway. A newborn infant "becomes the child of the man who pays the chief helper or midwife at the birth." Since the father's sister determines the midwife, the father usually enjoys the best chance to establish his claims. But if he should lack the requisite fee or happen to be away, another man is likely to arrogate paternity and the true parents are not legally entitled to retain the infant. In theory the real father might indeed redeem his offspring at a later period, but practically the payments traditionally exacted—involving double the amount expended in the child's interest—prove prohibitive. This applies especially after the adopter has paid the boy's initiation fee for entrance into the men's society. Rivers interprets this extravagant tendency to adopt unrelated children as a sign of pristine community of children—itsself connected with a one-time sexual communism. However this may be, Oceania as a whole represents a main center for adoption carried to unusual lengths. In Polynesia childless Tahitians adopted children, and those blessed with progeny took over additional ones while giving away some of their own. In such cases the practise cemented the friendship of the households concerned, and the children themselves divided their time happily between their two homes. In this extreme form the custom inevitably modifies the principle of the universality of the individual family.

Adoption of adults occurs in a number of ways. A common one in North America is that connected with ceremonial affiliation. When a Hidatsa (North Dakota) buys entrance to a military society with his age mates, the group of sellers are collectively the purchaser's "fathers," irrespective of the magnitude of the difference in age between the groups, and each buyer has an individual "father," from whom he buys the relevant paraphernalia and instruction.

The logical consequences of adoption are generally carried out with astonishing rigor. If a man X adopts a boy Y in a matrilineal tribe, Y is reckoned as a member not of the adopter's clan but of his wife's: that is, he automatically falls into the group to which X's own children belong. Further, other individuals at once apply kinship terms to the newcomer in consistency with the assumption that he is X's son. In other words, X's brother (according to the common form of terminology found with clan organizations) calls Y "son" and expects to be called "father" by him; X's sister calls the boy by a distinctive nephew term and is reciprocally designated as an "aunt," and so forth. Adoption naturally leads to a fusion of diverse blood lineages, and the transition from a maternal family to a clan composed of two or more unrelated maternal lineages is most readily understood on this basis. Their distinctness is ultimately forgotten, and the fiction of a common descent welds all individuals into a single unit—just as in modern civilization community of political allegiance is constantly confounded with racial community. In latter day Hopi villages there are actually clans formed by a combination of several such lineages, both types being rated equivalent, regardless of the blood homogeneity or heterogeneity of their membership.

Primitive adoption customs rest on a mental attitude difficult to conceive for those nurtured in western traditions. Savages commonly have a generic love of children that is in no way dependent on a sense of consanguinity. A South African Negro insists on claims to his wife's offspring even when they are demonstrably begotten in adulterous intercourse. A Toda in southern India establishes his paternity by a fixed rite, and his wife's son, begotten ten years after the husband's death, becomes the deceased man's heir unless some other man has subsequently performed the ceremony. From all accounts the adopted child by legal fiction is in every case treated with all the loving-kindness lavished on a real child. If anything, he becomes the object of exaggerated tenderness.

ROBERT H. LOWIE

See: KINSHIP; FAMILY; MARRIAGE; ANTHROPOLOGY.

MODERN. Adoption was the ancient, as it is the modern, method of creating by law the relationship of parent and child. It is an old

institution in India and Japan. In Rome, since the religious headship of the family and the inheritance of property passed from father to son, the motive recognized by the law providing for adoption was the desire for an heir who would promote or continue the prestige of the family. The abstract rule was that adoption should imitate nature, and in consequence the civil law required that the adopting parent must be at least fifteen years older than the child adopted and must not be a relative within the prescribed limits of consanguinity. Adoption was carefully considered in the preparation of the Napoleonic Code, and with limitations the Roman provisions were followed. Other countries of Europe whose codes are based on the civil law have also with statutory modifications and with new safeguards followed the Roman law. Legal provision for adoption is now practically universal in Europe, Great Britain, the United States and Canada, but not so universal in South and Central America. The modern motive, however, is not the strengthening of the family but, as W. Clarke Hall puts it, the conferring of the "privileges of parents upon the childless and the protection of parents upon the parentless."

Legal adoption was unknown to the common law and was not authorized by statute in Great Britain until 1926. In English law the child had no absolute right to succeed to any part of the parent's property, but could be disinherited by will in favor of either relatives or strangers. It was possible, therefore, without resort to adoption, for family titles to be continued and family estates kept together when there was no direct male descendant. Provision for care of dependent children by means of adoption was probably delayed by the development of the relation of master and apprentice. By means of this arrangement orphans and children of indigent parents could be bound out, while the rights of the master and of the parent under this relationship were defined by law.

In the United States the first statute legalizing adoption as we now think of it was passed by Massachusetts in 1851. With local modifications the Massachusetts statute became the model for the laws which followed in other states, in Illinois, for example, in 1867 and in Kansas in 1868. Provisions for adoption by deed certified and filed as in a transfer of property were formerly not uncommon in the southern states and have been only recently repealed in Iowa and Pennsylvania.

Although the provisions of the present statutes regulating adoption vary from state to state, there are many similarities. The age of the adopting parent is seldom specified in the law. Louisiana, however, reflecting the influence of its early settlement, follows the civil law in providing that the person adopting shall be at least forty years of age and fifteen years older than the person adopted. A few states, among them Illinois, Minnesota, New Mexico and Virginia, provide that a person may adopt only a child not his own by birth. Almost all the states require the consent of the living parents of a child born in wedlock, and the consent of the mother of a child born out of wedlock, or the consent of the legal guardian of children whose parents are mentally incompetent, guilty of desertion or found by the court to be unfit to retain the custody of their children. In many states the consent of the legal guardian must be supplemented by that of a public official, the agency to which the child has been previously committed or someone appointed as a next friend by the court. As for the authority of the adopting parent over the adopted child, the laws usually provide that adoption establishes the legal relation of a parent to a child born in wedlock, including reciprocal inheritance.

The laws of the states make the welfare of the child of paramount importance in adoption, but with advancing standards of child care the concept of what constitutes a "fit and proper" home for dependent children has greatly changed. The best children's agencies now require that adoption be preceded by a careful investigation with a view to determining whether the child's physical needs will be met in the adoptive home, whether he will be morally safeguarded and given an opportunity for an education and the development of his capacities. They are also seeking with the help of the psychiatrist and the psychologist to determine whether the psychological conditions in the new home will not warp the child's development. This involves an examination of the compatibility and personalities of the adoptive parents and of the child. A trial period of a year or six months in the adoptive home is considered a necessary safeguard. In only a few states is the jurisdiction over adoption lodged with the Juvenile Court or Court of Domestic Relations. It has frequently been pointed out by students of the subject that the judge who is given this responsibility should understand

the problems which follow breaking up family ties and the transfer of children, and should have the resources for obtaining the information necessary for an intelligent decision as to what is in the interest of the children.

A movement to increase the safeguards established by law and provide administrative machinery for making these safeguards really effective has developed in recent years. A Michigan law enacted in 1891 was one of the first to require that the judge make an investigation before entering the decree of adoption; it was later amended to provide that the investigation should be made for the judge by the county agent or a probation officer. In Minnesota the court is required by statute to notify the State Board of Control when a petition for adoption is filed, and the board in turn must inquire into the condition and antecedents of the child and the suitability of the proposed adoptive home, and must submit a report of the investigation in writing to the court. New York requires investigation by some person or agency specifically designated by the court. In Massachusetts any judge of a probate court may appoint a guardian *ad litem* to find the facts in any proceeding relating to the care, custody or maintenance of minor children, while in Pennsylvania the court may cause investigation to be made by some person or agency specifically designated.

With the increased interest in safeguarding adoptions in the United States there has been at the same time a decrease in the number of children available for adoption and an increase in the number of foster parents desiring to adopt children. At present in the United States the practise of taking children from their parents solely on the ground of poverty is rapidly disappearing. Better wages, improved health conditions and workmen's compensation laws have prevented the break-up of many families. The so-called "mothers' pensions" or "funds to parents" acts passed in the United States and many European countries during the past twenty years, and the expansion and improvement of the work of children's agencies and family welfare societies, have also been major causes of this change in policy. Foster home care for children, as distinguished from institutional care, has greatly increased, and the work of children's aid societies in home finding, investigation before placement and supervision after placement has greatly improved. As a result the practise of receiving children in fam-

ily homes has increased, and foster parents have felt that the probability of a happy outcome in the event of adoption is greater. This has led to an increase in the demand for children to adopt. Although provision for legal adoption was not made in Great Britain until 1926, the practise of receiving children into their homes and rearing them as their own was not uncommon among the British, and such children were called "adopted" children. According to the report of the Committee on Child Adoption, 1921, there was concurrence among the witnesses who had experience in social work regarding a greatly increased demand for children to adopt, and hence a growing need for legal protection in adoption. The war and the epidemic of influenza in 1918 increased the number of orphans and of childless parents in many countries and led to an increased interest in adoption.

Records of child adoption are not as a rule separately kept by the courts in the United States of America, so that it is not possible to say how many petitions for adoption are approved each year in the United States. In Minnesota, where investigation of all petitions by a state department is required by law, the State Board of Control reports 701 adoptions in a two-year period from 1924 to 1926. Recent studies of adoption have given the information for several important urban centers. These indicate local variation in the numbers seeking to adopt children. Thus the report of the Children's Commission of Pennsylvania for 1925 points out that Allegheny County (Pittsburgh) has twice the number of adoptions in proportion to population as Philadelphia. On the other hand comparison of records of adoption in Suffolk (Boston) and Norfolk counties in Massachusetts with those in Cook County (Chicago) in Illinois shows approximately the same rate of adoption per 100,000 population for these counties.

While the percentage of children adopted in the United States who are of illegitimate birth is large, it varies greatly. Thus the studies referred to above showed that approximately 35 percent of the adoptions in Philadelphia County involved children born out of wedlock, in the state of Minnesota 44 percent, in Cook County, Illinois, 51 percent and in the Massachusetts counties 61 percent.

Incomplete reports from other countries indicate that adoption is probably much less frequent elsewhere than in the United States,

but is increasing since the war, and especially since the enactment of new legislation in recent years. For example, in France from 1910 to 1913 the average number adopted per year was 129; from 1919 to 1922 it was 267. In 1923, when new legislation facilitating adoption became operative, the number was 613, and in 1924 it was 1700. In Berlin, which has a population one third greater than that of Chicago, the average number adopted for the four-year period 1923-26 was 179. Pre-war figures for Berlin are not available. In Württemberg the number of adoptions per year averaged 55 from 1909 to 1912, but had reached 157 in 1919. For Sweden, which did not legalize adoption until 1917, the average number of annual adoptions from 1923 to 1926 was 941.

GRACE ABBOTT

See: FAMILY LAW; GUARDIANSHIP; FAMILY; ILLEGITIMACY; CHILD WELFARE; CHILDREN, INSTITUTIONS FOR CARE OF; JUVENILE COURTS; SOCIAL CASE WORK; PLACING OUT; PARENTAL EDUCATION; MOTHERS' PENSIONS; APPRENTICESHIP; INDENTURE.

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ADOR, GUSTAVE (1845-1928), Swiss statesman. Until the World War his career was typical of that of a successful Swiss politician. Having been elected a member of the municipal legislature of his township Cologny in 1871, he joined the cantonal legislature three years later and the federal parliament in 1878. For over thirty years before the war he played a prominent part in all Genevese affairs as a member and several times as head of the government, or as leader of the opposition when the conservative party, to which he belonged, was out of power.

When the war broke out he organized, as president of the International Red Cross Committee, the so-called "Agence des Prisonniers de Guerre" for the search of missing soldiers and for the establishment of relations between prisoners of war and their families. In 1917 he became a member of the federal government under somewhat dramatic circumstances, his predecessor Hoffmann having been obliged to resign because his attitude had been deemed incompatible with the recognized policy of Swiss neutrality. In 1919 Ador was chosen by his colleagues in the government to be president of Switzerland and in that capacity he visited Paris during the Peace Conference. He took an active part in the negotiations which led to Switzerland's joining the League of Nations while retaining her military neutrality. Ador resigned his federal executive office in 1919. Having completely retired from Swiss politics, he remained a Swiss delegate to the Assembly of the League of Nations from 1920 until 1924.

Being politically active all his life, Ador, whose main characteristics were honesty, practical common sense, fearlessness and tact, rather than original constructive statesmanship, found no time for scientific research or for writing of any kind.

W. E. RAPPARD

Consult: Traz, Robert de, *Gustave Ador* (Lausanne 1919).

ADULT EDUCATION is an inclusive term which, as it is currently employed, embraces within its meaning the following varieties of activity: continuation education; corrective education; functional-group education; and folk

schools or people's colleges. A term which includes so many varieties of educational endeavor must necessarily be ambiguous. There is, however, a marked trend in the direction of limiting the use of the term to projects concerned with functional-group education and folk schools or people's colleges.

Continuation education is a projection of education from adolescence into adulthood. In most cases continuation classes are conducted under the auspices of the public school system; since those taking advantage of this form of education are for the most part young workers, the classes are usually held in the late afternoon or evening. There is no settled policy regarding the curricula for such classes, but the trend in the United States has been predominantly vocational; academic, cultural and social objectives have gained during recent years.

Corrective education represents an attempt to offer adults an opportunity for the compensation of deficiencies in their earlier education. The emphasis here is again largely vocational; adults discover the need for some specific knowledge or skill which for some reason or other they did not acquire during childhood or adolescence; they begin learning in adulthood in order to relieve this deficiency. They may, of course, find these opportunities in continuation classes.

Functional-group education is frequently motivated by the desire of adults to secure education because of some urgency arising from their membership in a group. Danish farmers, for example, embarked upon a program of adult education shortly after the middle of the nineteenth century; they had been defeated in a disastrous war; they had lost their market for wheat and were hence compelled to make radical adjustments in agricultural production; at the same time they realized that these momentous adjustments could not be made by an illiterate population. Consequently they undertook to educate themselves as adults, as farmers and as citizens impelled toward a new nationalistic orientation. Likewise industrial workers of England in the early part of the same century recognized the necessity of further education, not merely to enhance their vocational opportunities but to render them more effective as trade unionists. Workers' education has since spread to all industrial areas.

Folk schools or people's colleges originated in Denmark and have continued as the most

conspicuous form of adult education in the Scandinavian countries and Germany. Similar institutions have lately come into existence in England, the United States and other countries. The folk school is a resident institution appealing largely to adults who are passing through the later stages of adolescence. The content is predominantly cultural and the objective is to orient students with respect to social, economic, aesthetic and historical factors of their environment. These institutions stand outside the academic system, require no entrance examinations and offer no degrees.

In addition to the above classifications are numerous other educational ventures for, by and of adults, which are usually regarded as a part of adult education. Those demanding special attention are: women's clubs, Chautauquas, lyceums, university extension, correspondence schools, libraries, museums and discussion groups. One of the latest groups belonging to this miscellaneous category is composed of parents; the bulk of parental education at present consists of groups organized for the purpose of child study. There is, however, a decided trend toward including all of the functions of parenthood in such education.

Adult education crosses the path of the social sciences at three points: its general philosophy, or, more particularly, its motivations, objectives and aims; its content, or the relation between its subject matter and existing cultural patterns; and its method, or its pedagogical and psychological foundation.

There is no unified philosophy of adult education, no agreement with respect to objectives and aims. This is, of course, not to be wondered at, since general educational philosophy is forever in flux. The debate continues between those who insist that all education, including adult education, can have but one legitimate aim, namely the intellectual growth of the individual, and those who with equal persistence contend that the aim should be social. The argument, stated in these terms, will never end. An individual's primary motivation to seek education as an adult may be conceived in individualistic, personal terms, but once he begins utilizing this education he finds himself in a social milieu. Indeed he cannot even participate in the educational experience without responding to, and initiating, social stimuli. The acute problem in this area of motivations and objectives is not rooted in the inquiry as to how the adult's education is to be

ultimately used but rather in what specifically motivates him at the moment. Adults seek intellectual growth because they believe in its effectiveness to endow them with greater power, with increased facilities for expressing themselves as personalities, with larger freedom; they wish to create, to appreciate; they desire to become better specialists or to reach beyond their specializations. Adult education needs no truer philosophy than to be alert in responding to this wide range of motivations. And if a special group, a collective unit, wishes to educate its members in order to enhance the total group's welfare, the result is merely a reenforcement of motivations.

The content for adult education is derived from individual and group needs; it is influenced by the sponsoring agency, the local setting, the availability of teachers and the intellectual capacity of adult students. In many instances the content for adult education represents merely an adaptation of academic curricula; in other cases adult classes and institutions have evolved their content by a process of conscious opposition to academic traditions. The exceedingly wide variation in subject matter existing at present makes generalization impossible.

The chief debate in this area of content revolves about the question: Shall adult education be cultural or vocational? The term "cultural" is used in this connection to denote subject matter which has no direct utilitarian purpose but which is intended to enrich intellectual and appreciative life. In Denmark, for example, the people's colleges undertake to teach only non-vocational subjects; their curricula are made up of such studies as literature, music, art, economics, history, etc. In the United States, on the other hand, the efforts of adults to improve their knowledge in order to enhance their vocational status are called adult education. Moreover, many subjects which are taught from the cultural point of view are discovered to have later vocational applications. The line of demarcation between vocational and cultural subjects is not as sharply defined as many believe. Any subject may eventually prove to have utilitarian value, and by the same token a vocational subject may lead to cultural considerations. The real essence of the problem of content lies in discovering what adults are prepared to learn rather than in determining what should be taught. From the sociological point of view, the curriculum should be derived from the impending adjustments

which adults are called upon to make in any given cultural situation. From the pedagogical point of view, subjects should begin where interest is alert and acute. And, from the psychological point of view, subjects for adult classes should be compatible with the intellectual levels of the prospective students.

Since adult education proceeds under the auspices of so wide a number of institutions and agencies, it is to be expected that there will exist also a wide variation in pedagogical method. An assemblage gathered within a huge tent listening to a noted lecturer is classified under the heading of adult education, and an individual pursuing a correspondence course is likewise placed in the same category. But between these two extremes lies the great bulk of that educational activity which is slowly coming to be called adult education, namely, small study groups or classes following a definite sequence of subject matter. Each of such groups is supplied with a teacher, and the method of learning is one in which students are stimulated and guided by the teacher. Often the teacher uses the same methods as are employed in ordinary schools and colleges. If there is anything distinctive about method in adult education, it is derived from the growing use of discussion. The discussion method has come to be the accepted learning process for large numbers of adult classes. It is, of course, a method admirably suited to adults; the teacher and the students are often on the same level of experience, and through discussion this experience is utilized as educative material. Moreover, adults are likely to desire a participating share in their education; they can achieve this much more advantageously through discussion than through reading, recitation and listening to lectures. The discussion method represents a social process; the entire group reveals through discussion not merely its knowledge but its feelings, interests and prejudices. It is, in short, a method of cooperative learning.

The so-called adult education movement assumed form and substance in the United States during the decade following the Great War. The Carnegie Corporation brought into existence an advisory committee, and in addition conducted several exhaustive surveys; a national conference was held in Cleveland under its auspices in 1925, at which time the decision was taken to organize an American Association for Adult Education. This organization has maintained headquarters in New York City

since October, 1926. Its functions are not primarily promotional or operative; it serves as a "clearing-house" for general information, sponsors studies, researches and demonstrations, and acts as a national coordinator for the movement as a whole. The researches which have resulted from both the Carnegie Corporation's activities and those of the American Association for Adult Education are listed in the bibliography below. From the point of view of the social sciences, the two significant aspects of research sponsored by the American Association for Adult Education are: community surveys conducted for the purpose of discovering the available educational opportunities for adults; and psychological experiments designed to reveal the educability of adults. With respect to the latter problem, Professor E. L. Thorndike concludes that general ability to learn rises until about the age of twenty and then, perhaps after a stationary period of some years, slowly declines; the decline is very slow, perhaps one per cent per year, and it is probably safe to say that adults under fifty should not be deterred from learning anything which they really need to learn.

EDUARD C. LINDEMAN

See: EDUCATION; VOCATIONAL EDUCATION; WORKERS' EDUCATION; CONTINUATION SCHOOLS; CORRESPONDENCE SCHOOLS; UNIVERSITY EXTENSION; PEOPLE'S UNIVERSITIES; FOLK SCHOOLS; CHAUTAUQUAS; PARENTAL EDUCATION; WOMEN'S ORGANIZATIONS; LIBRARIES; MUSEUMS.

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ADULTERATION is the debasing of a commodity by admixtures of foreign, inferior or harmful material or by reducing its grade below that which it is represented to be, to the loss or disadvantage of the user, either in money or in service rendered.

Adulteration may increase weight or bulk, improve or alter appearance or flavor to simulate an article of higher grade or different kind. Sometimes a valuable substance is extracted and substitution made of a color or flavor which conceals the loss (e.g. skimmed milk given the appearance of creaminess by addition of a yellow dye). Sometimes one commodity is sold under the name of another (e.g. a mixture of low grade white flour and bran sold as graham flour).

In another class of cases poisonous, tainted or diseased material is mixed with sound (decomposed salmon tinned with fresh salmon). Defects may be concealed by special processing or packaging (tainted sausage disguised by strong spices). Factory made furniture is very commonly modified and finished to simulate antiques. Sometimes even worm holes are introduced into new lumber by ingenious devices, and a close imitation of the wear and tankard dents of centuries of European wassailing is produced on table tops in American mass production plants.

Recorded practises of adulteration date from the earliest times and have been in frequent evidence throughout the civilized world since the early Middle Ages. The methods and devices used have at all times drawn from the most advanced ideas of science and the arts, and important discoveries in chemistry have formed the basis for a whole system of adulterative practises—the use of artificial preservatives in foods, for example.

The reasons for adulterative practises are constant, and plain enough, but the technique is continually changing. The protection afforded the ultimate consumer (who is given no practicable redress under the common law) varies from no protection at all in some countries and states to fairly effective safeguards for commodities that enter into interstate commerce and which, moreover, affect life or health. These include food and drugs, but not cosmetics; seeds and fertilizer and insecticides, involving the

welfare of a large agricultural population; and a few kinds of goods, such as soap, when infrequently the question of unfair competition brings the matter into issue before the Federal Trade Commission in the interest primarily, not of the public, but of competitors who are put at a disadvantage in the market.

In a very limited class of commodities, such as meat and milk, a considerable degree of protection is afforded, in a very few states, even when production and distribution are intrastate. In many jurisdictions, however, such control activities as exist are dealt with by public authorities more as a political football than as a problem for technicians.

Adulteration appears as a factor in every kind of merchandise. Fugitive and water-soluble dyes are substituted for permanent pigmenting materials in ordinary writing ink and in textile fabrics; castile soap is made with fats far different from, and cheaper than, olive oil; inoperative or "dummy" vacuum tubes are introduced into radio sets because such sets are commonly valued by the buyer on the basis of the number of tubes employed; illuminating gas is reduced in heating value by admixture of inert gases; electric lamp bulbs of the inefficient carbon filament type are made to simulate the modern efficient tungsten lamps; and reworked wool, or shoddy, is used as a cheap and non-durable substitute for virgin wool in clothing. Most of such adulterations go undetected by an overwhelming majority of consumers, but are not likely to elude inspection by the government or by the few hundred of the more progressive manufacturing corporations which conduct elaborate and costly tests to protect themselves against commercial cheating. Against such large scale frauds as the substitution of inferior woods for mahogany in furniture, of inferior, split and artificial leather for real leather in luggage, and of hare and woodchuck furs for sable, fox, mink and skunk, the ultimate consumer has no practicable mode of protection under the going structure of law, administrative government and industry. Unfortunately middlemen or retailers, who nominally act as the purchasing agents for the consumer, have only to a negligible degree offered him assistance in his increasingly varied and difficult problems of purchase.

The amount of technical and legal activity required even for the moderate amount of food and drug control work that has been carried on in the United States since 1906 can be judged from the fact that, under federal control alone,

which is limited to interstate commerce and imports, about 25,000 cases have been reported to the legal arms of the government for court action, and decisions have been handed down in 16,000 cases. Imported goods have been proceeded against in nearly 200,000 cases; 300,000 food and drug samples have been collected and examined.

The practical control of adulterative practises of all kinds depends first upon standards—that is, accepted uniform definitions and requirements; and second, upon an active and coordinated system of inspection, examination and test based upon those standards. The common adulteration of paint, for example, with all sorts of inferior oil vehicles and mineral "extenders" and inert powders, like whiting and ground flint, remains impossible to control in the public interest until a proper paint for a given purpose has been described and defined in precise and reproducible terms in the form of a standard specification. As yet comprehensive specifications for paint are practically available only through their use by the federal government in its purchases.

Such a national system of specifications already exists for many of the more important food and drug products. For other consumers' goods, standards are largely lacking or, if in existence, are not in common and recognized use. Their growth in the future will probably depend largely upon such national and governmental standardizing agencies as the U. S. Bureau of Standards and the American Standards Association, a federation of forty organizations made up of seven government departments, twenty-three national industrial and trade associations and ten technical societies.

It seems probable that the wide development of such standards must wait upon a considerable and articulate public demand. The development of this demand will very likely depend upon educational activities conducted by one or more of the great foundations. There is not—and perhaps there cannot be, with the present American political structure—any other powerful organized group of a sort having a predominant and financially potent economic interest in the improvement of the consumer's status as to the quality of the goods which he buys. Reform, where it has occurred in the past in a few special fields, has followed exposure of very bad practises so extensively pursued as to characterize, in effect, a whole industry or group of industries, and so to lead to a radical legislative remedy

in the protection of public interest and welfare.

F. J. SCHLINK

See: FOOD AND DRUG REGULATION; INSPECTION; FRAUD; UNFAIR COMPETITION; GRADING; STANDARDIZATION; BUSINESS ETHICS; CONSUMERS' LEAGUES; ADVERTISING.

Consult: Monier, F., Chesney, F., and Roux, E., *Traité théorique et pratique des fraudes et falsifications*, 2 vols. (Paris 1925-27); Chase, S., and Schlink, F. J., *Your Money's Worth* (New York 1927); Blyth, A. W., Blyth, M. W., and Cox, H. E., "History of Adulteration" in *Foods, Their Composition and Analysis* (7th ed. London 1928) p. 3-54; American Medical Association, *Nostrums and Quackery*, 2 vols. (Chicago 1912-21); Wiley, H. W., *1001 Tests for Foods, Beverages, and Toilet Accessories* (New York 1916); U. S. Federal Trade Commission, *Annual Reports* (Washington 1915-); U. S. Bureau of Standards, *Standards Yearbook* (Washington 1927-); a bibliography for 1901-25 of food inspection decisions of the Bureau of Chemistry, in U. S. Department of Agriculture, *Miscellaneous Publication no. 9* (Washington 1927) p. 93-96; articles by F. J. Schlink, A. S. McAllister and R. A. Brady in *American Academy of Political and Social Science, Annals*, vol. cxxxvii (1928) 231-52.

ADULTERY. See MARRIAGE; FAMILY LAW.

AD VALOREM AND SPECIFIC DUTIES.

A duty levied as a fixed percentage of the price of an imported article is called an ad valorem duty. A duty levied as a fixed number of cents or dollars per pound, gallon or other unit is called a specific duty. The duty on the standard grade of sugar when imported from Cuba—1.7648 cents per pound in 1928—is a specific duty. The equivalent ad valorem duty, when the selling price in Cuba is 2.2 cents per pound, would be about 80 percent. If, however, the price should advance to 3 cents per pound, the equivalent ad valorem duty would be reduced to about 59 percent.

Specific duties are sometimes supposed to be more acceptable to protectionists and ad valorem duties to free traders. There is no necessary connection. Ad valorem duties may accord a high degree of protection, and specific duties may be very moderate. However, in the United States tariffs enacted or proposed by the political parties advocating high protection have in general been characterized by a preponderance of specific duties, while the reverse has been true of the tariffs enacted or proposed by their opponents. One reason is that a high measure of protection may appear less offensive when expressed as a specific rather than as an ad valorem duty. For example, consumers may not appreciate so keenly the burden of the duty

on sugar when expressed as 1.76 cents per pound as when expressed as 80 percent ad valorem.

There are two other reasons why protectionists prefer specific duties. First, when prices are falling and in consequence the need of protection is more keenly felt, an unchanged specific duty assures a constantly increasing rate of protection, as indicated by the ad valorem equivalent. Second, when the price of the protected article is subject to violent fluctuations, an ad valorem duty gives the least protection, as measured by the difference between the domestic and foreign price, when prices are low and protection is most needed; and the greatest protection when prices are high and protection is least needed. That is, the benefit from an ad valorem duty varies inversely as the need for such benefit.

The bearing on protection of these two methods of assessing duties is not the only factor to be considered in choosing between them. Ease of assessment and lessening of the likelihood of fraud are factors. The amount due when the duty is assessed by the pound or other unit is easily ascertained and is unequivocal. On the other hand, when the duty is ad valorem the amount due the government may be open to doubt. Such duties are usually assessed on the foreign price as shown by the invoice. But this may be based on a false valuation, and cannot be checked by an independent survey except at considerable trouble and expense.

To overcome the danger of fraud the domestic price has been suggested as a basis for computing ad valorem duties. A strong effort was made in the Act of 1922 and again in 1929 to substitute American valuations. As proposed by advocates of the change, American valuation may be based on the "United States selling price," that is, the price which an importer would pay for the article laid down at an American port before the duty was paid, the price of a similar competing article in the United States or the cost of production in the United States of a similar competing article. It is to be observed that these three bases are not identical. The value arrived at by the last two methods should exceed that arrived at by the first method by approximately the duty.

Advocates of American valuation stress the alleged frauds of undervaluation arising from our present method, the difficulties which appraisers experience in checking the foreign prices submitted by importers as a base for

reckoning the duties which they propose to pay, and the virtual espionage on foreign soil frequently involved in making this check. Such methods, they claim, are a source of international friction.

Opponents of the change minimize the importance of fraudulent undervaluation. They assert that custom house statistics reveal that less than one tenth of one percent of the entries were intentionally undervalued. They deny that the change would contribute to efficiency, asserting, on the contrary, that whether the merchandise is purchased outright (in which case the invoices are documentary evidence of market value) or sold on consignment, the appraisers are in a position to determine more speedily and accurately the base on which the duty should be computed than under any plan of American valuation. They point out that a large part of the imports are of goods that are not comparable with any goods being sold in the markets of the United States. They claim that the change would work a serious hardship to merchants and importers: under American valuation the latter would be unable to estimate the duty in advance and hence their business would become hazardous and speculative. Finally an abstract argument against American valuation is that it would give an administration biased in favor of manufacturing interests a dangerous power of "flexing" the tariff in their behalf.

Back of all these arguments is the fact that under American valuation a high duty may be concealed under an apparently moderate rate. American valuation therefore appeals to protectionists. It is significant that at the congressional hearings the advocates of American valuation have been representatives of manufacturing interests, while those opposing the change were representatives of importers and commercial interests.

However, aside from any question of fraud, some articles lend themselves to one type of duty and some to the other type. Standardized articles, such as wheat, pig iron and sugar, lend themselves to specific duties. On the other hand articles presenting a wide range of qualities and values, such as textiles, lend themselves to ad valorem duties. Frequently to secure the uncompromising precision of the specific duty and yet retain something of the flexibility of the ad valorem duty, a series of specific duties, each limited to a range of values, is imposed. For example, in the United States

Tariff Act of 1922 the duty on steel bars, valued at not over 1 cent per pound, is $\frac{2}{10}$ of 1 cent per pound; valued above 1 cent and not above $1\frac{1}{2}$ cents per pound, $\frac{3}{10}$ of 1 cent per pound; and so on by ascending steps to a value exceeding 16 cents per pound, when the duty becomes 20 percent ad valorem.

PHILIP G. WRIGHT

See: CUSTOMS DUTIES; PROTECTION; FREE TRADE.

Consult: "Ad Valorem and Specific Duties" in United States Tariff Commission, *Dictionary of Tariff Information* (Washington 1924) p. 14-15; Higginson, J. H., *Tariffs at Work* (London 1913) p. 47-74; Gregory, T. E. G., *Tariffs* (London 1921) p. 116-43; U. S. Senate, 50th Cong., 1st sess., *Reports*, vol. ix (1887-88) pt. i, p. 5-7, and appendix, p. 51-53, in which are given opinions on ad valorem and specific duties by nine secretaries of the treasury; United States Tariff Commission, *Information concerning American Valuation as the Basis for Assessing Duties ad Valorem* (Washington 1921); U. S. House of Representatives, 70th Cong., 2nd sess., Ways and Means Committee, *Hearings*, vol. xvi (1929) p. 10194-273.

ADVERTISING. Originally the term signified communication or the conveying of information, but advertising is now most commonly thought of as involving persuasion of some sort as well as information. It is impossible in discussing modern advertising and its institutional arrangements to keep political, religious, educational and other propaganda wholly separated from trade publicity.

As communication rather than persuasion, or at least persuasion to buy, advertising had its earliest recorded use in ancient civilization. Descriptions of runaway slaves and proffered rewards for their return, written on papyri more than three thousand years ago, have been uncovered in the ruins of Thebes. Advertising communication was not limited to written forms, however, in early civilization. The crier of goods for sale and of rewards for the discovery of possessions or persons lost appears to have been common in ancient Greece. Venus herself, according to tradition, engaged Mercury for the latter purpose. The Romans made no small use of advertising. Professional men publicly offered their services on their house walls. Painted notices that property was for sale or lease appeared on doors of buildings. Excavations in Herculaneum and Pompeii have disclosed painted wall signs picturing gladiators and urging attendance at their exploits. Other walls advertised plays, and still others baths—"warm, sea and fresh water."

The general illiteracy of Europe in the Middle

Ages and the limited channels for the movement of ideas of any sort made criers the chief medium of trade publicity. Criers became a national institution in England and also in France, where they formed an organization as early as the twelfth century, perhaps an early illustration of an advertisers' association. In both countries they were employed by shop and inn keepers. The wine criers of Paris not only attracted attention with their horns and their voices but also offered samples of the ware proclaimed.

The seventeenth century in England must be stressed even in a brief history of advertising, for it foreshadowed nearly all that has come since. In the early part of the century billing was the chief form used, with St. Paul's Cathedral, according to Sampson, as the most popular place for posting, and personal services, runaway servants, quack medicines and books as the most frequent subject matter. Ben Jonson, with a ridicule for book advertisers which amusingly contrasts with certain current book selling efforts, enjoined his bookseller to sell his works for wrapping paper rather than by the common means. The earliest advertising in newspapers in England came also in the seventeenth century with the rise of the "mercuries," as the newspapers of the day were called. Among early examples is one with a rather modern sound: "Warhams Excellent Mouthwater, which . . . preserves the Gums and Teeth, takes off all smells proceeding from bad teeth, etc. Is prepared and sold only by W. Strode . . . Tottenham Court Road. . . ." It is interesting to notice the extent to which early English trade advertisements proclaimed nostrums which could not fulfil the claims made for them; and books which no man can describe accurately for another; and new commodities to which, if they were to be sold, favorable attention had to be drawn by such devious devices as the testimony of imaginary physicians.

The modern manifestations of advertising are to be accounted for only in terms of the patterns of economic and social life of which they are parts. Modern advertising is part and parcel of the whole set of thought movements and mechanical techniques which changed the mediaeval into the modern world. In its full history it must be related to the Renaissance; account must be taken of the growth of reading, the development of schools, the advent of public education and the eventual development of an all but general literacy. Advertising is related also to that decreasing commercial use of pack

horses throughout the seventeenth century which made transport by wagon and cart "wonted practise" by 1700. It is related to the continued development of transportation by clipper, steamer, train and airplane. The history must include the inauguration of a postal system, another great feat of seventeenth century England, and its expansion and improvement. The growth of publications must be followed from the meager beginnings mentioned above to the present number and variety. The story of these changes must be interwoven with that of changes in knowledge and techniques. The development of road materials, of iron, of steel, of paint, of paper, of ink must all be included, and also a consideration of the significance of steam, electricity, radio, photography, and expanding skills in printing, etching, plate making, news gathering, appealing. All of these, in both their early and later development, are important because they make possible the economic basis of advertising—because they are features of the economic order of which advertising is a part.

The rise of advertising coincidentally with the reorganization of industry in the seventeenth and eighteenth centuries indicates its economic basis. In a world of self-sufficing individuals or groups it is of little importance that one knows what others do or plan to do. In a world where producers specialize, it is all important. Without such knowledge specialization cannot be carried on. In so far as advertising is relied upon for information, it may be said to be fundamental to specialization, for information is fundamental in relating and integrating the specialized units of our production system. Advertising furnishes significant information in two areas. One may be called the trade area. Business men advertise to other business men. As business always involves buying and selling materials or goods or services or some or all of them, mine operators, railroad companies, farmers, manufacturers, merchants, financiers, risk takers and advertisers are anxious to be informed of sources and outlets. Chiefly through trade publications all of these advertise to give or secure this information. The second area in which advertising furnishes information is the consumer area. The consumer, being a specialist, often producing nothing which he himself can use, needs information as to what has been made available for him. His trust that information and goods will be available is what makes it possible for him to specialize. Even considering the wide display of possible purchases now put before most consumers by de-

partment stores and other retailers and the army of specialty salesmen, advertising in printed form provides more information than any other agency. The necessary reliance of business man and consumer upon advertising raises the possibility of a misplaced faith. A discussion of this is best postponed until we have considered the organization for creating and distributing advertising.

The institutional machinery of advertising is massive and complex, since the conveying of economic information has become as much a business as those businesses which it serves. The advertising mechanism in America consists of three chief divisions: first, those enterprises which devise and operate media for carrying publicity; second, the agencies which relate the advertisers to the media; third, an unclassifiable list of supplementary businesses. The media through which advertising may be carried to prospective buyers are many, but they are chiefly newspapers, magazines, outdoor facilities, car-cards, theater films and programs, radio and direct mail material. All except the last are called the media for general advertising. Each of the media of general advertising is itself an enormous business. There were in the United States in 1927 some two thousand dailies, eleven thousand news weeklies and several hundred semi-weekly newspapers. There were approximately seven thousand magazines and periodicals, of which about four thousand were monthlies. The value of a periodical for advertising varies with its circulation and its quality. The latter, for a specific purpose, depends upon many factors, varying with the article for sale and the age, sex, taste and purchasing power of readers. The specialization of magazines aids the advertiser, such magazines as *Furniture Age* and *The National Grocer* reaching different readers from those subscribing to *Farm and Fireside*, *Advertising and Selling*, *The Dental Digest*, *Golfers' Magazine* or *The American Boy*. Announcements of the extent of periodical circulation are now usually dependable. The chief agency for authoritative statement in this field is the Audit Bureau of Circulations, an organization comprising advertisers, advertising agents and publishers.

The most important forms of outdoor advertising are posters, painted and electrical displays and occasionally sky writing by airplane. Posters are now usually of certain standard dimensions adapted to standard poster boards, of which

there are several hundred thousand in the United States. Painted display, a highly organized business, is the modern elaboration of the advertising with which the residents of Pompeii were familiar. The "wall," which is still frequently used literally, has in many other cases become a "bulletin"; that is, a wall constructed solely for the purpose of painted signs. Many of these are now built of small sections that may be taken down and painted indoors. "Painted copy" usually "runs" for several months. Electrical displays in their many bizarre forms and sky writing need no description.

Car-card advertising has been made significant by the developments which compel thousands of people to travel upon street cars or suburban trains every working day. Development of the business of confronting travelers with urgent proposals for expenditure has led to a standardization of cards and "runs." Advertising on theater programs and more recently on moving picture films constitutes a large business. The advent of the radio has reintroduced the crier, galvanized and glorified. "Time" is purchased from radio broadcasting companies and is utilized usually for the broadcasting of excellent programs with minor comment of an advertising character. To these media might be added many miscellaneous types of general advertising, including window display, novelties and business shows.

Advertising which goes directly from advertiser to prospect is called direct advertising. Its technique consists first of selecting likely prospects and second of devising mailing pieces calculated to secure the desired results. Mailing pieces are often planned as a series which, directed to the prospect one after another, are intended to find any possible weakness in his disinclination to buy or take advantage of impressions earlier made. Direct advertising is the sole instrument of some advertisers, although it is more commonly used in conjunction with general advertising. Special concerns are equipped to plan and execute any or all phases of direct advertising.

The most important single unit in the American advertising machine is the advertising agency. This institution has become a highly specialized middleman acting between the advertisers as buyers and the media as sellers of space. While some advertisers carry on every function of the agency for themselves, the larger ones usually rely on agencies. The agency in America had its beginnings before the Civil

War in certain "agents" who, contracting for space in publications, resold it to manufacturers or other advertisers. The agency now represents the advertiser rather than the space seller, buying for his client such space in media as he believes useful in any given case. The agency, however, receives its remuneration from the publications in the form of a recognized 15 per cent commission. The fully developed modern agency is far more than a middleman dealing in space. It has become an institution which carries all the advertising tasks of the advertiser. Agency operations commonly include: first, securing the "accounts" of advertisers; second, conducting investigations of the products concerned and of markets, media and methods; third, planning the advertising, which often takes the form of a campaign or a series of campaigns and may be combined with a merchandising plan also devised by the agency; fourth, preparing the copy; fifth, selecting the media, giving attention, among other matters, to size and dates of showings and relationships to other aspects of the merchandising plan; sixth, constructing the plan of illustration, type, lay-out and the like, and often looking after the physical production of drawings, etchings and type plates; seventh, aiding in "merchandising the advertising," which consists of interesting salesmen, dealers or others involved in the merchandising activities.

The advertising agencies have been responsible for a very large part of whatever degree of science has found its way into advertising. Their research departments, manned in some part by men trained in the tools of the social sciences, have seriously endeavored to reduce guess work. Together with certain periodicals they have gathered, and encouraged governmental agencies and trade associations to gather, data which make it easier to estimate the needs, wants and abilities to pay of various parts of the population. All of this, however, has not always made advertising profitable. Although numerous examples of great success achieved through advertising are cited, the possibilities of determining in advance the profits to be derived from advertising leave much for the business man to desire. The statement of one leading agency that it "practises advertising as an almost exact science," is reminiscent of Dr. Johnson's statement in 1759 that "the trade of advertising is now so near to perfection that it is not easy to propose any improvement." Advertising is probably no nearer an exact science now than it

was near to perfection then. It remains a matter of strategy rather than of scientific certainty.

The adjuncts of the principal advertising mechanisms include businesses or industries concerned with printing, paper making, copy writing, advertising art, electrotypes manufacture, photography and many other activities. Any of these may be integrated with a medium or an agency or may operate independently. Trade associations bind together for mutual benefit several divisions of the advertising world. The most inclusive is the International Advertising Association. This organization has recently established a Bureau of Research and Education for purposes implicit in its title.

Although the institutional machinery of advertising is more developed in the United States than elsewhere, it has advanced in all countries that have been touched by western economic methods, taking patterns similar to those described. English styles are closest to our own. The complete sales appeal is less developed in continental advertising; but in publicity, especially through distinctive posters, Germany and particularly France are notable. Trade publications are better in Germany than elsewhere in Europe. The farming out of space is still common, and Americans find circulation figures less satisfactorily checked than at home. In South America and the Orient advertising is expanding; Japan, in fact, is on a footing with England and the United States.

The usual measure applied to advertising costs is the gross amount paid for the various media. There are no authentic figures to be had, but persons in a position to have reasonably accurate information estimate the total outlay in the United States for 1928 at between one and a half billion and two billion dollars. The same sources make more detailed estimates as follows: newspapers, \$765,000,000; magazines, about \$191,000,000; business papers, \$95,000,000; outdoor media, \$80,000,000; theater, \$1,600,000; direct mail, \$450,000,000. This leaves street car, radio advertising and samples uncounted. From such figures of the "white space sales" of media, erroneous conclusions are frequently drawn. They are used to illustrate the high cost of selling. This neglects the cost of alternative methods. Advertising is ordinarily used because it is relatively inexpensive. The same deduction overlooks the space bought by educational, religious, charitable and political organizations for propaganda purposes. In a campaign year the latter is large. Moreover, a

large offset must be made for other services performed by the same expenditure. Much of the cost of newspapers and magazines, for example, is paid for in advertising receipts.

It has been suggested above that selling takes place in two areas: selling to the trade, that is, to extractors, manufacturers, railroad companies, financiers, risk takers, advertising institutions, merchants and other specialized producers; and selling to consumers. In the first of these areas there has been little questioning of the social merit of advertising. It is assumed that the trade buyer is sufficiently pecuniarily minded and sufficiently informed to protect himself.

Against consumer advertising, however, several charges are made. First is the declaration that dishonest and fraudulent advertisements lure large sums from customers. Investigations by the American Medical Association and the Federal Trade Commission justify the conclusion that these charges are well based. Chairman Humphrey of the Federal Trade Commission, admitting that there was no method by which the amount could be accurately measured, estimated, in 1928, that the amount taken annually by fraudulent advertising was more than five hundred million dollars. The greatest portion of this he believed to be drawn from the sick, the poor and the ignorant through advertisements of medicines, cures, fake schools and the like, although other credulous persons contribute heavily. Fraud by advertising and using the mails to defraud are clearly unlawful, and both the Department of Justice and the Post Office Department have acted with vigor but without complete success. The Federal Trade Commission in the autumn of 1928 organized, with the cooperation of publishers, an attack upon fraudulent advertising and the publications which carry them.

Advertising interests have by no means been wholly lacking in the past in actions against untruthful advertising. A number of publications carry a guarantee of the reliability of all advertisements that appear in their columns. Many individual publications censor all advertising submitted and suggest the modification of objectionable copy or refuse it. A model statute for the prevention of fraudulent advertising was drawn up in 1911 under the direction of *Printers' Ink*, probably the most important trade publication in the advertising world; and this law, or a modification of it, is now in effect in most of the states. A National Vigilance Committee which was con-

cerned with enforcement of the law was organized in 1912 by the Associated Advertising Clubs of the World. Its work was later largely taken over by the Better Business bureaus, national and local, which also played a part in the plans of the Federal Trade Commission. Although, as one advertising man comments, "the war against untruthful advertising has been long and bitter," the end of the imposter, the fraud and the cheat in advertising is not yet. One continuing difficulty is to distinguish between what is outright fraud and what is misrepresentation and near fraud.

A second charge against advertising is its alleged vulgarity. This takes various forms. A more specific charge is that advertisers disfigure walls, sidewalks and scenery and force a brash and garish intrusion upon our senses. England has for many years felt the need of regulating the advertiser's willingness to press his interests upon the attention of the public. As early as 1853 advertising vans were prohibited in London, and the sandwich man has long since been moved from the sidewalk to the gutter. There was formed in England in 1893 an organization called the Scapa, the National Society for Checking the Abuses of Public Advertising. In France, Germany, Switzerland, Italy, Austria, Hungary, the countries of South America, and the United States as well, regulation of billposting has been necessary. These regulations in some instances are left to a general police control. Some specifically forbid the disfigurement of landscapes. In other instances laws protect public monuments and limit the size and height of billboards. In the United States such regulation is for the most part in charge of the municipalities. Advertisers contend that in cities their billboards are far more sightly than the vacant lots and rubbish piles which they sometimes hide. Their case is perhaps weaker when they are charged with the concealment and disfigurement of rural scenery, which was satirized recently in the verse:

Along the country roads there grow
Willow trees and Texaco,
Mobiloids and marigold,
And other fruits of men and mold.

Another alleged vulgarity of advertising is found in its insistent appeal to mankind's lower or less admirable motives. A casual survey of advertisements in the most commonly read general or women's periodicals discloses frequent attacks upon the prospect through his fear, shame, vanity, ostentation or snobbery. It is

surprising how frequently such motives are appealed to by reputable concerns selling reputable goods. Many concerns also rely upon testimonials (bearing all the earmarks of being solicited and paid for) of movie stars, pugilists, society leaders, professional ball players and minor representatives of royalty. It is all the more depressing to realize that even after study advertisers find such motives the most moving and such methods the most effective. That these motives and methods are not limited to America is indicated by the remarks of a prominent English advertising man who, in commenting enthusiastically in 1928 upon a campaign based on emulation, said: "If you would sell cars to the British public, appeal to their sense of snobbery, create a definite class appeal. Tell them how many kings and queens and bishops and right honorables are using your car."

The study of the psychology of advertising, which has had a good deal of attention and discussion for two decades, together with the experiences of advertising writers, has produced several classifiable methods of approaching readers. These include emotional copy, "reason why" copy, narrative copy, human interest copy, testimonial copy, suggestive copy. These are ways of dressing the so-called appeals. The appeals themselves must inevitably be to human attitudes, ideas, emotions, instincts or ways of behaving, according to the kind of psychology one has in mind.

The criticism often made that advertising exercises a control over the consumer's mind and choices is more or less implicit in the foregoing. One specific form of alleged control is a monopoly created by impressing a brand upon the consumer's consciousness. Since ancient Egypt makers have attempted and succeeded in doing this with trade marks. The consumer is in part exploited, in part protected by this. While a widely advertised brand by no means always indicates the best obtainable, it does in a great majority of cases indicate dependable goods. Moreover, although the consumer does not know in any technical sense what a brand means, he can be reasonably sure that successive units will be of uniform quality.

The competitive waste of advertising competing brands, perhaps equally good, is of concern to every student of advertising. So it was more than two hundred years ago. There has even been improvement, if one is to believe what Addison wrote in the *Tatler* in 1710: "... above half the advertisements one meets with

now-a-days are purely polemical. The inventors of 'Strops for Razors' have written against one another for several years. . . ." Of this waste, if waste it be, it must be said, as might be said of all struggles for the control of the consumer, including even the modern giant struggles of trade associations, that the waste is not in advertising but in the competitive system. If industries must battle in the market, printers' ink, paper and advertiser's art are the cheapest ammunition in the arsenal of sales effort.

But the criticism of control takes a more general form. Advertising is charged with an influence upon the habits of consumption and the standards of taste of the consumer. There is no doubt that there is such an influence. The millions spent on consumer advertising have no other purpose; and, although many appeals prove ineffective, the millions are not all spent in vain. The question whether this influence is desirable or undesirable is not so easily dismissed. It raises issues of a fundamental sort. The question involved is, how shall the standards of life be determined? The criticism of the advertiser's influence on the consumer's mind is usually based on the theory that the consumer is capable of knowing what he wants without outside suggestion. This theory is clearly untenable. What one comes to call the good life is determined by post-natal influences. The problem is, what shall the influences be? It may be said that whoever devises and directs the influences, it should not be those who are themselves influenced by a view to profit. This is a satisfactory generalization until one asks: Who should be responsible? How should the responsible agents be selected? How should they be compensated?

In eras when society was not able to produce beyond bare necessities, tradition, the medicine man and priest may have been satisfactory guides to the courses which life should take. But the great development of advertising came concomitantly with a reorganization of social production machinery. As an almost necessary part of the increase of production there has come an amazing invention of consumers' goods. New resources, specialization and the machine have produced not only more wealth but vastly greater variety.

Advertising, in spite of its costs, has proved itself an economical tool in the modern business system for bringing information as to possible choices before the many possible buyers. It has been used to urge upon every specialized

producer whatever has become available for use in production technique and upon every consumer whatever has become available for consumption. But the few standards for a narrow physical life which the consumer may have developed in a simpler day have been not so much erased by the flood of advertising rhetoric as they have been submerged in the onrush of improvements and overwhelmed in the torrent of variety. While by no means all materials or goods which were made a generation ago, and are still made, have been improved, how can the standards which guided either maker or user among the relatively few choices of that day be anything but impotent before the technique and diversity of today? Where opportunity to profit seemed possible, advertisers have honestly and accurately, or inaccurately and dishonestly, as the case might be, informed business men and consumers of the possibility of choice. They have used truth, deception, cajolery, vulgarity—almost every method known—to show and to persuade. They have in part, although by no means entirely, accepted the crude consumption standards of a crude world and appealed to them with crude methods.

But this great advertising activity has been largely due to the fact that advertisers have accepted increased productivity and, more important, its corollary, increased consumptivity. In accepting the first, they have often found it necessary to "go to the country"—the consumer—to secure acceptance by producers of important technical improvements. In accepting consumptivity they have been alone. The bankers have preached investments; the economist has taught saving; the schools have inculcated thrift. Our tradition is a tradition of careful frugality. The pillars of our society were built for a society of strict economy. No agency with a public interest was ready, with the coming of the new productivity, to encourage or guide in the enjoyment of the new wealth; nor has any since been ready to point the way to good use. Only now the economist is beginning to wonder if saving cannot go too far; if more spending may not be good even for production.

Consumer advertising is the first rough effort of a society becoming prosperous to teach itself the use of the relatively great wealth of new resources, new technique and a reorganized production method. Whatever eventually becomes of advertising, society must provide some device for this task. Some agency must keep before the consumer the possibilities resulting from con-

stant advance, for the world appears to be learning to produce goods ever faster. Today the voices crying most loudly in the wilderness of consumption are more concerned with noisily advertising the weaknesses of advertising than with the patient teaching of standards of taste which will reform advertising by indirection. Other action is possible. An increase of government specifications would help, although not as much as is often thought, and they would require an enormous amount of advertising. What is most needed for American consumption is training in art and taste in a generous consumption of goods, if such there can be. If beauty is profitable, no manufacturer is desirous of producing crudity or vulgarity. Advertising, whether for good or ill, is the greatest force at work against the traditional economy of an age-long poverty as well as that of our own pioneer period; it is almost the only force at work against puritanism in consumption. It can infuse art into the things of life; and it will, if such an art is possible and if those who realize what it is will let the people know.

LEVERETT S. LYON

See: BUSINESS; COMPETITION; MARKETING; TRADE MARK; ADULTERATION; FRAUD; UNFAIR COMPETITION; WASTE; BUSINESS ETHICS; CONSUMPTION; SALESMANSHIP; PRESS; PUBLICITY; PROPAGANDA.

Consult: Sampson, Henry, *A History of Advertising* (London 1874); Presbrey, Frank, *The History and Development of Advertising* (New York 1929); Mataja, V., *Die Reklame* (2nd ed. Munich 1916); Goodall, G. W., *Advertising* (London 1914), with an introduction by Sidney Webb; Starch, Daniel, *Advertising Principles* (Chicago 1927); Sheldon, G. H., *Advertising* (New York 1925); Vaughn, F. L., *Marketing and Advertising* (Princeton 1928); Vaile, R. S., *Economics of Advertising* (New York 1927); "Standardization and the Consumer" in American Academy of Political and Social Science, *Annals*, vol. cxxxvii, no. 226 (May 1928); Hart, C. S., *Foreign Advertising Methods* (New York 1928); Höller, F., *Die moderne Reklamenunternehmung* (Munich 1925).

ADVISORY BOARDS. *See* BOARDS, ADVISORY.

ADVISORY OPINIONS.

NATIONAL. The historical relations of the English judges to the Crown and to the House of Lords explain the practise by which English judges gave opinions upon legal questions extrajudicially, that is to say, otherwise than as judgments. Since the English king was the fountain of justice and since the English national courts evolved from the *curia regis*, the English king retained the power, when acting



in his judicial capacity, of consulting his judges. The Privy Council, to which the monarch's judicial powers came to be delegated, likewise consulted the judges; and when in 1833 Parliament created the present Judicial Committee of the Privy Council (3 & 4 Wm. IV, c. 41), the duty was conferred upon it of advising the Crown on legal questions. Similarly from the king's power to compel the attendance of his judges in the *curia regis* there grew up the practise of calling on the judges to advise the monarch in his executive capacity. By 1770 this power was well recognized, although ten years earlier the judges had announced that they would not be bound in litigation before them by extra-judicial opinions previously given [Sackville's Case, 2 Eden 371 (1760)]. Since the establishment of the Judicial Committee of the Privy Council, resort to the judges has become unnecessary when the opinions of the law officers, the normal guides of the government in matters of law, are deemed insufficient. In recent years, however, several parliamentary acts have permitted references to the High Court for advice [51 & 52 Vict. Stat., v. 25, c. 41 § 29 (1888); 10 & 11 Geo. V, c. 30 (1920)]. The judges have been unfriendly to such legislation. A recent attempt to extend this practise encountered the stubborn and successful opposition of the law lords [see *Parliamentary Debates*, 5th series, vol. lxx, 755, 795, 914 (1928)].

From the time of Edward I judges have been summoned to aid the House of Lords in both its judicial and its legislative capacities. With a notable exception [Duke of York's Case, Rot. Parl., 39 Henry VI, no. 12 (1460)], they have always attended on request, and at the time of the American Revolution it was well settled that they were bound to give advice on questions of law arising in cases before the house (Blackstone's *Commentaries*, vol. i, *168). But ever since the judicial functions of the House of Lords have been entrusted to the law lords, the opinions of the judges have been less and less frequently invoked. In recent times, also, the right of the House of Lords to ask the judges "what the law is, in order to better inform itself how, if at all, the law should be altered," has lain dormant, but as late as 1912 its existence was recognized [Attorney General for Ontario v. Attorney General for Dominion (1912) A. C. 571, 586]. While the judges have declined to answer questions because not "confined to the strict legal construction of existing acts of Parliament" [*In re The London and West-*

minster Bank, 2 Cl. & F. 191, 193 (1834); M'Naghten's Case, 10 Cl. & F. 200 (1843)], "the right to have the opinions of the Judges on abstract questions of existing law" was vigorously affirmed.

In the United States the advisory opinion did not follow its English history. The doctrine of the separation of powers, its basis and applications, as well as the unique scope of judicial review under American written constitutions, have always confined American judges, in the main, to adjudication. The framers of the constitution rejected the proposal to confer upon the executive and Congress the right to require opinions from the Supreme Court (Farrand, Max, *Records of the Federal Convention*, 3 vols., New Haven 1911, vol. ii, p. 341). When, therefore, President Washington in 1793 submitted to the justices of the Supreme Court twenty-nine questions (Sparks, Jared, *Writings of George Washington*, 12 vols., Boston 1834-38, vol. x (1836) append. xviii) concerning America's neutral rights in the Franco-British conflict, Chief Justice Jay and his associates politely but firmly refused to comply with the request. Jay argued that the constitutional provision enabling the president to call upon the heads of departments for advice precluded the possibility of requiring advisory opinions of the justices, and the giving of such opinions would not be a proper exercise of the "judicial power." The court has ever since rigorously abstained from such advisory opinions, even when elicited in the guise of formal litigation [see series of decisions from Hayburn's Case, 2 Dall. 409 (U. S. 1792) to *Muskat v. United States*, 219 U. S. 346 (1911)]. It has based its repeated refusals to entertain other than actual litigation *inter partes* on its conceptions of the requirements of the separation of powers and the restriction of "judicial power" under the constitution to the disposition of "a case or controversy." Upon like considerations the High Court of Australia has excluded advisory opinions from the scope of "judicial power" under the Australian constitution, which is largely modeled upon that of the United States [see *Luna Park, Ltd. v. Commonwealth of Australia*, 32 Comm. L. R. 596 (1923)].

In most of the states the inability to resort to the courts or their judges for advisory opinions, on the part of either the executive or the legislature, is a firmly rooted doctrine of public law. So far as the advisory opinion has prevailed in American states, Massachusetts has set the ex-

ample. It was first introduced in the Massachusetts constitution of 1780 (pt. 2, c. 3, art. 2); the first opinion was given in 1781 [Opinions of the Justices (1781), 126 Mass. 547 (1879)], and it has survived two efforts to secure its repeal, in 1820 and again in 1853. This feature of the Massachusetts constitution was followed in the New Hampshire constitution of 1784 (now art. 74, of the constitution of 1902); in the Maine constitution of 1820 (art. 6, § 3); in the Rhode Island constitution of 1842 (art. x, § 3, reaffirmed in amendment xii, § 2, 1903); and is still maintained in these New England states. The practise was also adopted in the Florida constitution of 1868 (now art. iv, § 13), in the Colorado constitution of 1886 (art. vi, § 3) and in South Dakota in 1889 (art. v, § 13). Two states have sanctioned the advisory opinion by statute without explicit constitutional authority [see Alabama Civil Code, §§ 10290-91 (1923); Opinions of the Justices, 209 Ala. 593 (1923); and Revised Code of Delaware, c. 13, § 2, c. 110, § 11 (1915)]. But in several states there has been a recession in the use of the advisory opinion. The second Missouri constitution adopted the device in 1865 (art. vi, § 11), but it had an ineffective history and was abandoned by the constitutional revision of 1875. In Vermont the statute of 1864 authorized advisory opinions and was repealed in 1915, and in Minnesota such a statute was declared unconstitutional [Matter of Senate, 10 Minn. 78 (1865)]. In New York, North Carolina, Nebraska, Oklahoma and Pennsylvania advisory opinions were at first given without statutory authorization, but the practise has become atrophied. And in some of these states power to do so has been explicitly denied by the highest court [*Re Board of Public Lands*, 37 Neb. 425 (1893); *Matter of State Industrial Commission*, 224 N. Y. 13 (1918); Opinions of the Justices, 64 N. C. 785, 792 (1870)]. Likewise in Connecticut and Ohio the judges have refused to give opinions requested by their legislatures [*Reply of the Judges*, 33 Conn. 586 (1867); *State v. Baughman*, 38 Oh. St. 455 (1882.)]

In Canada the idea of the advisory opinion does not find itself in the grip of the doctrine of the separation of powers, nor is it involved in the unique scope of judicial review over legislation to which the American constitutional system gives rise. But even in Canada the use of the advisory opinion has encountered judicial opposition. Nevertheless it has won its way, so that at present the governor general or either

house of Parliament may require the opinion of the Supreme Court of Canada upon any question of law or fact concerning the constitutionality of any dominion or provincial legislation or on any other matter which the governor in council sees fit to submit [*Revised Statutes of Canada* 1927, c. 35, §§ 55-56; see *Attorney General for Ontario v. Attorney General for Canada* (1912), A. C. 571, 585-86]. Seven of the nine provinces have likewise adopted statutes requiring their respective courts to answer similar questions. In several of the Latin American countries there are provisions for legislative reference of legal questions to the courts and for the participation by the judges in legislation affecting the codes of these countries (Rodriquez, J. I., *American Constitutions*, 2 vols., Washington 1906-07, vol. i, p. 278, 313, 375, 415; vol. ii, p. 336-37).

The procedure for eliciting advisory opinions is relatively simple. The executive, by written request, or either house of the legislature by resolution, submits to judges a number of questions affecting a proposed measure or action. Answers are given by the judges collectively or *seriatim*. Even where the duty of giving such opinions is well established, the judges may refuse to express opinions, for they very often exercise the right to pass upon the reasonableness of the demand made upon them [*Interrogatories of the Senate*, 54 Colo. 166 (1913); *Answer of the Justices*, 148 Mass. 623 (1889); *Answers of the Justices*, 95 Maine 564 (1901); *Matter of Northern Missouri R. R.*, 51 Mo. 586 (1873)]. That the giving of advisory opinions by judges runs counter to the instinctive feeling of American lawyers is attested by the refinements to which courts have resorted in order to contract the scope of this duty. Thus, as a condition of giving advisory opinions, courts have required that no private rights be involved [*Opinion of the Court*, 62 N. H. 704 (1816), but see *Opinion of the Justices*, 190 Mass. 611 (1906)]; that no existing statutes be affected [*Re Penitentiary Commissioners*, 19 Colo. 409 (1894)]; that the question be *publica juris* and framed with sufficient definiteness; that no questions of fact be in issue [see *Dinan v. Swig*, 223 Mass. 516 (1916)]; and, usually, that the question be not of a nature affecting private interests [*Re Opinion of the Judges*, 43 S. D. 645, 647 (1920)]. Under the Canadian practise any question submitted is conclusively deemed to be appropriate for response. In all states, with

the exception of Colorado [Matter of Constitutionality of S. B. 65, 12 Colo. 466 (1889)], the opinions are those of the individual judges and are not given as the opinions of the court. Thus, legally, they are not binding in later litigation. But while the technical doctrine of *stare decisis* is not applicable, the views expressed in an advisory opinion not only receive careful consideration in subsequent litigation but in fact exercise a powerful influence psychologically upon adjudication [see Loring v. Young, 239 Mass. 349, 361 (1921)]. In Colorado such opinions have the authority of decisions.

The device, it is urged, permits the prompt resolution of legal doubts and avoids the waste of enacting legislation which the courts subsequently invalidate. But these conditions treat questions of law and constitutionality in *abstracto*, and fail to consider the practical implications of the American constitutional system. Constitutionality is not a fixed quality; in crucial cases it resolves itself into a judgment upon facts. Every tendency to deal with constitutional questions abstractly, to formulate them in terms of barren legal questions, leads to dialectics, to sterile conclusions unrelated to actualities. Legislation is largely empirical, based on probabilities, on hopes and fears and not on demonstration. To meet the intricate and subtle problems of modern industrialism, the legislature must have ample scope for putting its prophecies to the test of proof. To submit legislative proposals rather than the deliberate enactments of the legislature to judicial judgment is to submit legislative doubts instead of legislative convictions. The whole focus of the judicial vision thereby becomes altered. Legislation is thus deprived of its creative opportunities. For the history of modern legislation amply proves that facts may often be established in support of measures after enactment, although not in existence previously.

When actual cases come before them, courts profess not to exercise revisory powers over legislation, and there is an important truth in the theory. The whole milieu of giving advisory opinions on proposed bills or executive action is inevitably different from the process of adjudication in litigation which contests either legislation or the assertion of legislative authority. Judges have frequently deplored the lack of competent legal assistance and the inadequate opportunity for mature deliberation in rendering advisory opinions. While in a few states

judges may command the assistance of the attorney general or *amici curiae*, in practise the aid of counsel is rarely received. Experience has shown that whatever provision may be made on paper, advisory opinions are bound to move in an unreal atmosphere. In the attitude of court and counsel, in the availability of facts which underlie litigation, there is a wide gulf between opinions in advance of legislation or executive action, and decisions in litigation after such proposals are embodied into law or carried into execution. Moreover advisory opinions involve the judges too intimately in the process of policy and thereby weaken confidence in the disinterestedness of their judicatory functions. On the other hand advisory opinions weaken legislative and popular responsibility. It is not merely the right of the legislature to legislate and of the executive to act; it is their duty. Legislatures and executives may inform themselves as best they can; but the burden of decision ought not to be shifted to the tribunal whose task is the most delicate in our whole scheme of government, involving as it does the power to set limits to legislative and executive action within those vague bounds which are undefined and *a priori* undefinable. In these considerations we must find explanation for the judicial hostility to advisory opinions even where, as in England, there are no formal restrictions against them.

FELIX FRANKFURTER

See: JUDICIAL PROCESS; JUDICIAL REVIEW; DECLARATORY JUDGMENTS; SEPARATION OF POWERS; CONSTITUTIONAL LAW; JUDICIARY; COURTS.

Consult: Macqueen, John, *The Appellate Jurisdiction of the House of Lords and Privy Council* (London 1842); Veeder, Van Vechten, "Advisory Opinions of the Judges of England" in *Harvard Law Review*, vol. xiii (1900) 358-70; Dubuque, Hugo, "The Duty of Judges as Constitutional Advisers" in *American Law Review*, vol. xxiv (1890) 369-98; Thayer, James B., *Legal Essays* (Boston 1908) p. 42-59; Grinnell, F. W., "The Duty of the Court to Give Advisory Opinions" in *Massachusetts Law Quarterly*, vol. ii (1917) 542-52; Ellingwood, Albert R., *Department Cooperation in State Government* (Menasha, Wis. 1918); Hudson, Manley O., "Advisory Opinions of National and International Courts" in *Harvard Law Review*, vol. xxxvii (1924) 970-1001; Frankfurter, Felix, "A Note on Advisory Opinions" in *Harvard Law Review*, vol. xxxvii (1924) 1002-09.

INTERNATIONAL. Disputing states have long been in the habit of inviting mediators, councils of conciliation or commissions of inquiry to advise them on a settlement. International organizations have frequently found it con-

venient to summon committees of jurists or to establish legal sections to advise them on legal problems. The pronouncements of such bodies might be called "advisory opinions."

The recommendations made by the Behring Sea, the North Atlantic Fisheries and other arbitral tribunals on certain points have some resemblance to advisory opinions, though motivated by considerations of expediency rather than of law. The term has, however, been confined in both national and international practise to opinions on disputes or questions of law not formally binding but issuing from a tribunal (or from its judges) with authority to give binding decisions.

Advisory opinions as a recognized international practise arose out of Article 14 of the League of Nations Covenant, which declared that the prospective Permanent Court of International Justice "may also give advisory opinions upon any dispute or question referred to it by the Council or by the Assembly." This provision seems to have originated in Lord Robert Cecil's draft covenant submitted to the Peace Conference on January 16, 1919, and was later supported by Larnaude, of France, after President Wilson's return to Paris. Modifications in the phraseology were suggested by David Hunter Miller, the American legal adviser, to exclude the possibility of compulsory jurisdiction developing under the clause, and by the drafting committee which changed the word "advice" to "advisory opinion," thus emphasizing the function's judicial character.

The commission of jurists which framed the court statute in the summer of 1920 provided that "questions" submitted for advisory opinion be considered by a special commission of the court with three to five members, while "disputes" so submitted be considered by the whole court "under the same conditions as if the case had been actually submitted to it for decision." There was disagreement, however, concerning this provision, and eventually the article in the draft statute dealing with advisory opinions was eliminated altogether. The judges of the court were thus confronted with the problem in drawing up their rules of procedure. Judge John Bassett Moore, of the United States, prepared a memorandum asserting that the giving of advisory opinions was not an "appropriate function of a court of justice," and might reduce the court's prestige and its opportunity to decide litigated cases. He concluded from the English text of the Covenant that the court

was at liberty to decline to give an advisory opinion when requested, and advised against including any rules on the subject, leaving the court free to handle each application on its merits.

This, however, was not done, and rules were drawn closely assimilating the procedure to that in litigated cases. A proposal that advisory opinions might be given secretly was voted down eleven to one, and the revised rules of 1926 expressly provided for the reading of advisory opinions in open court. The rules, in conformity with the Covenant, provide for requests for advisory opinions only by the Council and Assembly of the League. In practise only the Council has made such requests, though it has sometimes acted upon the initiative of the international labor organization or of certain states. It has not been decided what vote is required in the Council for such a request, although apparently, when the request concerns a dispute before the Council, the votes of the disputants are not necessary.

The court's statute is an instrument independent of the Covenant and rendered operative by a signed and ratified protocol. It defines the court's jurisdiction as "comprising all cases which the parties refer to it and all matters specially provided for in Treaties and Conventions in force" (art. 36). The last phrase appears to furnish the legal basis for the court's recognition of the advisory jurisdiction mentioned in the Covenant, and it would seem to furnish equal basis for recognizing advisory jurisdiction conferred by any other treaty. Doubtless, however, the court could refuse to accept any expansion of its advisory jurisdiction. The opinion of Judge Moore that the court was not obliged to respond to requests, even from the League Council, was confirmed, but with a substantial dissent, in the Eastern Carelia case. This arose out of a dispute between Finland and Russia, placed by the former before the Council without the latter's consent. The court refused to give an opinion on request of the Council, holding that it could not "even in giving advisory opinions depart from the essential rules governing their activities as a court." This is in accord with the established principle of international law that "no state can without its consent be compelled to submit its disputes with other states . . . to any kind of pacific settlement." The court has also indicated that it would decline to answer questions which were wholly abstract or lacking in precision.

Fifteen advisory opinions have been given by the court (1928), most of them dealing with the legal aspects of disputes between states. Several have dealt with the organization and competence of international organizations, particularly the international labor organization, and a few have defined the jurisdiction of international judicial and quasi-judicial bodies. The opinions in the last class on the scope of the jurisdiction of the League Council as limited by the domestic jurisdiction clause (Tunis Nationality decrees case) and on the limits of the court's own advisory jurisdiction (Eastern Carelia case) have been especially important for the development of international law.

A certain suspicion of advisory jurisdiction has been shown by several of the Americans who have had a hand in the development of the court, and by the United States Senate. The latter attached a reservation to its resolution of adherence to the court protocol, prohibiting the court from "entertaining any request for an advisory opinion touching any dispute or question in which the United States has or claims an interest." The unwillingness of the signatories of the court protocol to give the United States a veto on advisory opinions not enjoyed by any other state brought the matter to a deadlock. The fears that opinions might be based on inadequate argument, might prejudice the court's consideration of similar facts in subsequent litigation, might be ignored to the detriment of the court's prestige or might be given without consent and hearing of the real parties at interest, have not materialized. Nor has the court become involved in political controversies or lost its independence. The court has provided for the exercise of this jurisdiction in a way to render any such results extremely improbable.

Advisory opinions, although they do not render controversies formally *res adjudicata*, have in practise often served to settle international disputes and have been looked upon as sources of international law, equal in value to opinions in litigated cases. Like declaratory judgments they afford a means for authoritatively establishing legal points and thus preventing disputes from arising. They often make it possible for states to gain the advantage of judicial settlement for disputes which they would be unwilling to submit for decision. This is partly because requests for advisory opinions may be initiated by third states and made by the League Council without direct

responsibility of the litigants, and partly because advisory opinions are not formally binding. The advisory procedure, however, has the further merit that the legal can be separated from the political aspects of a controversy. Presence of the latter aspects frequently makes states unwilling to submit to arbitration or judicial decision, but often, with the legal aspects authoritatively decided and the facts clarified, the political problems prove to be readily soluble.

QUINCY WRIGHT

See: LEAGUE OF NATIONS; PERMANENT COURT OF INTERNATIONAL JUSTICE; INTERNATIONAL LAW; AGREEMENTS, INTERNATIONAL.

Consult: League of Nations, Permanent Court of International Justice, *Advisory Committee of Jurists, Procès verbaux of Proceedings* (The Hague 1920), and *Documents of the Statute of the Permanent Court* (Geneva 1921); Publications of the Permanent Court of International Justice, *Collection of Advisory Opinions, Ser. B.* (Leyden 1922-24) no. 1-15, and *Acts and Documents, Ser. D.* (Leyden 1922) no. 2, p. 397; Miller, David Hunter, *The Drafting of the Covenant*, 2 vols. (New York 1928); Bustamante, Antonio S. de, *The World Court* (New York 1925); Fachiri, Alexander P., *The Permanent Court of International Justice* (London 1925); Hudson, Manley O., *The Permanent Court of International Justice* (Cambridge, Mass. 1925); *The World Court, 1922-1928* (World Peace Foundation) (Boston 1928).

ÆGIDIUS COLONNA (c. 1250-1316), mediæval political theorist. From early youth he was a member of the order of Augustinian Friars. He is said to have become tutor to the future Philip the Fair of France, and it was for Philip that he prepared his most famous work, *De regimine principum* (first published in Augsburg, 1473, written before 1285). A mediæval French version of this work was edited by S. P. Molenaer, under the title, *Li livres du gouvernement des rois* (New York 1889). In 1295 Ægidius became archbishop of Bourges, and took the side of the pope against Philip the Fair in his second important work, *De ecclesiastica potestate*.

The first work, which was very well known in the late Middle Ages, is interesting as representing very clearly the influence of St. Thomas Aquinas' rediscovery of Aristotle's *Politics*. To Ægidius, as to St. Thomas, the state is no longer an artificial institution devised to remedy the evil in human nature, but the natural form and method of human life and progress. But *De regimine principum* is even more significant as illustrating the first appearance of a doctrine which became of great importance

in the sixteenth and seventeenth centuries. This was the thesis that the king is above the law since he is himself its source, thus contradicting not only the view of Aristotle, but also the traditional principle of mediaeval society, that the king or ruler is subject to the law of the country.

In *De ecclesiastica potestate* Aegidius maintains in its most extreme form the doctrine of Pope Innocent IV and the other canonists of the later thirteenth century that all temporal as well as spiritual matters are in principle subject to the church and the pope. He holds, moreover, that no one can justly hold temporal powers unless he is spiritually regenerated by baptism and sacramentally absolved by the church. In this he contradicts the doctrine even of Innocent IV, as well as of Aquinas, that political authority is lawful and natural among unbelievers as well as among Christian men. Aegidius expressed similar views concerning property. All property, he says, is under the *dominium* of the church, and can be held only by the man who is baptized and absolved. Wycliffe, in *De dominio civili*, may have been influenced by this conception.

A. J. CARLYLE

Consult: Janet, Paul, *Histoire de la science politique*, 2 vols. (Paris 1887) vol. ii, ch. iii; Dunning, W. A., *A History of Political Theories*, 3 vols. (New York 1902-20) vol. i, p. 207-12; Carlyle, R. W. and A. J., *A History of Mediaeval Political Theory in the West*, vols. i-v (Edinburgh 1903-) vol. v (1928) pt. i, ch. vi and pt. ii, ch. ix.

Aehrenthal, Alois Lexa, Graf von (1854-1912), Austrian diplomat and statesman. After a long apprenticeship as attaché and ambassador to Russia he became Austro-Hungarian foreign minister. Since he was known as an ardent supporter of close relations between the three imperial courts of Germany, Austria-Hungary and Russia, his subsequent steps against Russian interests in the Balkans came as a surprise. Aehrenthal, hoping to reestablish the prestige of the Dual Monarchy in international affairs, soon came into conflict with Izvolski, the Russian foreign minister, who was intent on making good the mistakes of the Japanese War and reviving the traditional Russian Near Eastern policy. The first clash came with the beginning of 1908 when Izvolski opposed Aehrenthal's plan for a railway through the Sanjak of Novi-Bazar, holding it to be an expression of the Austrian *Drang nach Osten* and a menace to the Slavic states of the Balkans.

Aehrenthal's name is associated chiefly with the crisis arising later in 1908 when Austria annexed the two Turkish provinces of Bosnia and Herzegovina, which had been occupied since 1878 under a mandate of the powers. At first, in the famous Buchlau interview between Aehrenthal and Izvolski, the latter gave his consent in exchange for Austrian approval of the opening of the Straits to Russian warships; but when the announcement of the annexation caused a storm in European chancelleries, Izvolski maintained that he had been deceived by Aehrenthal and came out in open opposition. The crisis dragged on through the winter of 1908-09, but war was finally averted. Austria was supported by Germany, Russia was in a state of military unpreparedness, and France and England were disinclined to go to war. Aehrenthal concluded a separate agreement with the Turks, and forced the intransigent Serbs to yield, after combatting the belligerent suggestions of Conrad von Hötzendorf, the Austrian chief of staff. The affair left Russo-Austrian relations exceedingly strained, and in a sense marked the beginning of the Near Eastern tension which ended in the World War.

WILLIAM L. LANGER

Consult: Molden, Berthold, Alois, *Graf Aehrenthal* (Stuttgart 1917); Hoijer, Olaf, *Vers la grande guerre; le comte d'Aehrenthal et la politique de violence* (Paris 1922); Friedjung, Heinrich, *Das Zeitalter des Imperialismus*, 3 vols. (Berlin 1919-22) vol. ii; Kanner, Heinrich, *Kaiserliche Katastrophenpolitik* (Vienna 1922); Conrad von Hötzendorf, Franz, *Aus meiner Dienstzeit*, 5 vols. (Vienna 1921-25) vols. i-ii, and the review of it by Emile Bourgeois in *Revue des sciences politiques*, vol. xlv (1923) 484-99; *British Documents on the Origins of the War, 1898-1914*, ed. by G. P. Gooch and Harold Temperley, vols. i-v, xi (London 1926-) vol. v, and the review of it by W. L. Langer in *Foreign Affairs*, vol. vii (1929) 635-49.

AENEAS SILVIUS. *See* PIUS II.

AERIAL LAW. *See* AVIATION; RADIO.

AFFORESTATION. *See* FORESTS.

AGAZZINI, MICHELE (1790-1840), Italian economist. Agazzini's best known and most important work, *La Science de l'économie politique, ou Principes de la formation, du progrès, et de la décadence de la richesse: et application de ces principes à l'administration économique des nations*, was issued in French (Paris 1822) and in Italian (Venice 1827). Later he published a critical essay on the theories of value of Smith,

Malthus and Say, *Sconvenevolezza delle teorie del valore insegnate da Smith, dai professori Malthus e Say e dagli scrittori più celebri di pubblica economia* (Milan 1834).

The *Economie politique* is remarkable for certain original ideas. For example, he considers the concept of cost of reproduction and the effects of forecasts and errors in forecasting. The principles of economics he expounds first in a milieu of isolated men (*l'état sauvage*); next in a single market, with exchanges; then in a market with differentiation in occupational training and state intervention; finally in a market with foreign trade, customs and money.

RICCARDO BACHI

AGE SOCIETIES. Apart from social units based on the blood tie, such as the family or the clan, many primitive communities recognize "associations." These unite members irrespective of real or putative kinship, but with a view to a common status or common interests. Among units of this type age grades and age societies constitute a distinct category.

Since savages generally fail to keep account of their ages by years, it is only approximate coevals that are grouped together. Puberty forms a natural line of demarcation. Boys or girls are often advanced to the status of adults by a ritual roughly equivalent to confirmation, and those initiated at the same time constitute a definite company. Later they marry and pass into the grade of married folk or "elders." This tripartite division of society was regarded by Schurtz as naturally reflecting the conflict of adjoining age groups or generations, hence he considered the grades of the uninitiated, of initiated single men and of elders as potentially universal and as the earliest forms of age grading. Wherever grades were more numerous, he assumed that there had simply been a subsequent elaboration of this primitive scheme.

This last conclusion may be at once dismissed as *a priori* rationalism. Whenever there is a joint admission into a definite age grade, the coevals thus initiated frequently form a definite group for life; and the number of such companies depends solely on the local conditions regulating initiation rites. Thus the Masai of East Africa have indeed three status grades corresponding to Schurtz's threefold division, but neither the uninitiated boys nor the married men form definite units. On the other hand all those initiated within the same quadrennium are linked together as a lifelong company with

mutual obligations and claims. An age mate in this sense occupies his fellow member's hut and enjoys marital rights over his host's wife when he visits a strange village; and of these age companies there would be at any one time not three, but possibly eight or nine.

The distribution of age grades militates against the theory that they represent an essential development of human society. Thus even in Schurtz's map their complete absence in Siberia is significant, while Father Schmidt restricts the range to parts of Oceania, Indonesia, southern Asia, East Africa, the Bororo in South America and the Eskimo in North America. This is doubtless going too far, for there is clear evidence that West African Negroes share the institution. Thus the Ibo are divided into eight classes, each with distinctive duties: one has to clean towns and roads, another clears away trees and acts as guards, and so forth. Each grade forms a society into which boys enter, sometimes even long before puberty, although more generally at that period. Usually some such rite as circumcision or tooth-filing marks the entrance into the lowest class. A merging into a different type of association is noted by Talbot for Nigeria, inasmuch as wealthy people could pay fees and thereby skip some of the lower grades.

The Northern Plains Indians had a similar division of male society—sometimes with parallel series of women's associations—into age societies. Among the Blackfoot the "All Comrades" were responsible for the safety of the camp, while among the Arapaho a whole series were under the guidance of the old men's grade. In other tribes of the area there was less integration of the several component units, though the underlying pattern was clearly uniform for a particular people. Closer examination has shown, however, that the age factor is not truly comparable to that of other regions. The essential feature in the plains is purchase of a set of ceremonial privileges, and it is merely through the fact that the rights are bought jointly by groups of approximate coevals that a basic division into age societies is produced.

In another sense, however, the age factor is obviously conspicuous even here, for why should age mates buy membership together? Schurtz must be recognized as having put his finger on a true bond in linking individuals together. His error lies merely in insisting on the necessity for formal association of coevals,

which the geographical facts of distribution fail to support. A tendency toward union on these lines, whether it finds formal expression or not, can hardly be denied.

ROBERT H. LOWIE

See: ASSOCIATION; FAMILY; CLAN; CASTE; GERONTOCRACY; SECRET SOCIETIES; SOCIAL ORGANIZATION.

Consult: Schurtz, Heinrich, *Altersklassen und Männerbünde* (Berlin 1902); Lowie, Robert H., *Primitive Society* (New York 1920); Schmidt, W., and Koppers, W., "Gesellschaft und Wirtschaft der Völker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912-24) vol. iii, pt. 1; Talbot, P. Amaury, *The Peoples of Southern Nigeria*, 4 vols. (London 1926).

AGENCY, in Anglo-American law, covers the bulk of relations and transactions in which one person (agent) is dealing with another (third party) on behalf of still another (principal). It is concerned therefore with the external business relations of an economic group or unit and with the powers of the various representatives to affect the legal situation of the principal (person or organized group). In the internal set-up of either the business or the production unit, agency plays its part primarily in the organization process: every member in being hired, fired or promoted is for the moment an outsider with reference to the unit, and deals as an outsider with some representative. And of course the eternal problem of government, whether of the state or of any other unit, involves agency with internal organization in another way: to cope with unforeseen conditions it is repeatedly necessary to give representatives powers wider than those they are normally expected to use. Thus an agent's effective powers in dealing with outsiders often extend to transactions which he is under a duty to his principal not to enter into ("apparent authority"; "authority" alone, or "real authority" covering the case where power, and privilege as against the principal to exert the power, are coextensive).

It is obvious that some type of legal representation became needed increasingly as business units came to involve transactions conducted at a distance (as in the case of factors) or grew in size (the firm, the house, the corporation). The original models seem to have been the steward of a lord and the servant with a specific matter to attend to; the law was therefore long plagued with refined distinctions between "general" agents, the only ones with whom an outsider could deal with moderate safety (the steward model), and "special" agents, whose powers the

courts viewed very narrowly. With the persistent shift to larger business units with a running organization of subdivided powers, the law has become more realistic on the point. Compare, for example, the recognition, in the doctrines of ratification and adoption, of the practise by which a principal approves a transaction which he (it) had not previously authorized—even, at times, when entered into by a person who was not at the time his (its) agent at all. Yet the law still lags; especially, perhaps, in the field of marketing. The courts attempt to bring most of the marketing structure under one or the other of two legal concepts: agency (the "title" to goods being in the principal, there follows, for example, permissible control of resale prices and, in the event of the agent's bankruptcy, the recovery by the principal of the specific goods and outstanding accounts; by this concept the contracts of the agent within his powers obligate the principal only); and sale (the "title" to goods being in the "representative," who owes the price and is alone responsible on his contracts, it follows that no resale price maintenance is enforceable). These concepts are taken as sufficient between them and as mutually exclusive. But they rather obviously fail to describe or deal adequately with the complicated marketing structure involved, for example, in "consignments" with or without immediate invoicing on fixed terms; in exclusive "representation" in a given territory with or without agreements for taking minimum quantities; or in subsidiary marketing corporations (involving, for example, tax questions, when the internal billing of goods is built to deprive one or the other corporation of any taxable profit or stockholders' rights, when the parent corporation is being "milked").

The business term "agency"—i.e. "some intermediary in the distribution process"—is thus at wide variance with what the lawyer understands by the word. Agency in law is confined to the useful but somewhat antiquated legal framework of the business set-up. It gives legal validity to most deals made by representatives. It imposes certain minimum duties on the representatives (diligence, good faith, accounting), in one instance, indeed, going beyond the current practises among higher executives (the principal may at his option take over any deal in the line of the agent's business which the agent has made on his own, without permission). But the law of agency affords no safeguard against what chiefly interests the business man—stupidity or bad judgment. This accounts, to a

great extent, for the growing practise of large units using standardized printed forms to limit their minor agents' discretion, and to make salesmen's agreements subject to approval by the home office or credit department. And the law of agency is especially open to abuse where the "principal" is not organized for supervision, as in the case of an absentee whose affairs are conducted by a trusted adviser, or in the case of the larger corporations where management has been dissociated from investment.

Concepts grow out of specific typical fact situations and are slow to become systematized; it is therefore not surprising that the concept of legal representation developed differently in different times and places, and even within a single legal system. Thus, apart from the mercantile field, other types of representation developed in regard to decedent's estates (executors, administrators), trusts and governmental officers. Each of these classes, as also in the case of corporation directors, is the subject of peculiar rules, at times widely different from those applicable to agents in general. A thoroughgoing systematization of the law of representation at large has never been worked out in Anglo-American law. And the fact that on the continent totally divergent institutional divisions of the same subject matter work out, in both domestic and international business intercourse, with practical results so similar to ours, leads one to wonder how far the legal theory on the subject has great practical import.

Such a doubt, at least, is well founded as to the philosophy of representation. The struggles of legal philosophers to explain or justify representation have moved from an outworn premise to solve an unreal problem. They begin with some such assumption as that a man can acquire rights or obligations only by exercise of his own will or by personal participation in some transaction (our "privity of contract"); there is then the problem of carrying the acts of the representative back to the will or acts of the principal—e.g. by a fiction of identification or by inventing a delegation of will; and finally the problem of finding a concept for this purpose which squares with all the rules on the subject, or the set of related subjects, existing at any given time in one legal territory. But it saves labor to think of law as in the main a reflection of felt expectations and necessities, and to recognize that legal rights and obligations are acquired in the first instance through exercise of the will not of the parties but of legal officials.

Under such a view representation becomes normal in law because normal in life. This is not to deny importance to legal philosophy or legal theory. The view that a principal must be in existence to be "represented" still ordinarily annuls an agent's powers on the unknown death of his principal; the feeling that a contract is an abnormal relation and can affect at most the contracting parties is still potent in the law; only by turning to account the notion of agency was assignment of debts accomplished; even negotiable paper carries, in the obligatory formula words "order" or "bearer," the marks of its origin in an agency to collect. But a modern legal philosophy has as its task, in this field as in others, rather to examine the origin and working of ancient premises than to accept them as posing its problems. Nor does it serve much purpose to attempt a complete philosophic harmonization of a set of rules, where some are fossils from a past age and some are only in process of emergence.

On the whole, agency has been of almost equal importance with contract as a device facilitating the development of the modern business structure—in good part because of its high flexibility. It was once a, if not the, major way of organizing a mercantile enterprise, as in the relationship between the master of a vessel, the supercargo and the factor. It still remains the major building material, even in the corporate structure. It has, moreover, been a fertile matrix of specialized adjustments: the transfer of contract; the attorney-at-law (naturally one of the earliest forms recognized by lawyers); brokerage; the power to a mortgagee to foreclose by sale even after the mortgagor's death; and, quite recently, the suability of an unincorporated labor union. Finally, with growing specialization, agency takes on another aspect, especially in the purveying of services; the specialized purveyor (as in bank handling of collections and stock brokerage) moves largely out of the control of his principal, becomes an independent unit and may gather sufficient financial power to finance and even control his scattered "principals" (so the textile factors and import bankers), or may by reason of distance and the manipulative opportunities of a central market call forth legislative control in the interest of his unorganized principals (so the produce commission men). In all such cases of independence of the "agent" the tendency is strong for the one-time agency to become swallowed up in contract, as between two independent dealers (railroads, warehouse-

men, stock brokers). In such cases the control of the specific operations passes increasingly out of the "principal," and the "agent" makes any necessary contracts or arrangements on his own account. In the grain elevator case the "agent" will not even be required to redeliver the same grain he received; in the case of a bank transmitting funds the money received goes into the bank's general assets, and only a pure contract relationship remains. On the production side, where the relationship as for example between "master" and "servant" is of a slightly different character since the "servant" does things for his "master," as contrasted with an agent who deals with people for his principal, there is a similar development toward a contractual arrangement; thus the master—or principal—is freed from responsibility for wrongs committed by the "independent contractor" in the course of getting the agreed job done.

K. N. LLEWELLYN

See: REPRESENTATION, LEGAL; LIABILITY; NEGLIGENCE; TORTS; STATE LIABILITY; CONTRACT; SALE; TRUST AND TRUSTEES; GUARDIANSHIP; BROKER; MARKETING.

Consult: Mechem, F. R., *A Treatise on the Law of Agency*, 2 vols. (2nd ed. Chicago 1914); Tiffany, F. B., *Handbook of the Law of Principal and Agent*, ed. by R. R. B. Powell (2nd ed. St. Paul 1924); American Law Institute, *Agency*, Restatement no. 1-4 (n. p. 1926-29); Holmes, O. W., "Agency" in *Collected Legal Papers* (New York 1920) p. 49-116 (first published in 1891); Isaacs, Nathan, "On Agents and 'Agencies'" in *Harvard Business Review*, vol. iii (1924-25) 265-74.

AGENT PROVOCATEUR. See ESPIONAGE.

AGGRESSION, INTERNATIONAL. Aggression, aggressive war and aggressor nation have become familiar terms during and since the World War. Before then the word "aggressive" was occasionally used as synonymous with "offensive" in describing and condemning certain kinds of war. The expression "offensive war" has fallen into disuse, and "aggressive war" is now often used as the antithesis of "defensive war." "Aggression" became the subject of renewed interest through the stipulation of the Versailles Treaty requiring Germany to make reparation "for all damage done to the civilian population of the Allies and their property by the aggression of Germany," and through the language employed in Article 10 of the League Covenant (1919) wherein "the members of the League undertake to respect

and preserve as against external aggression the territorial integrity and existing political independence of all members of the League." The Treaty of Mutual Assistance (1923) contributed the provision that "aggressive war is an international crime," etc. This phrase reappeared in the American Revision of the Treaty (1924) and in the subsequent Geneva Protocol of September 1924. In both the American Revision and the Protocol an attempt was made to base the definition of an "aggressor nation" on refusal of arbitration, whereby the crime of aggression might be better identified. All three proposals were designed to bolster up the sanctions of force contemplated by the Covenant, but were rejected by the League.

The inherent difficulty and danger of defining aggression was one of the reasons for rejection. The wisdom of this action is supported by the analogy between aggression and fraud. The courts, including English and American, have consistently refused to define "fraud" but will decide what constitutes fraud from the facts in each case. Manifestly it is much harder to set limits by definition to what constitutes aggression, because the conditions out of which war arises are far more complicated and elusive than in an individual case of fraud. But the principle is the same. Public opinion should be as free to pass upon aggression as courts are to determine fraud.

Notwithstanding the rejection of the Geneva Protocol, efforts have since been made to confine the outlawing of war to aggressive war. Such an effort was made by resolution in the United States Senate in the session of 1927-28, but failed. The issue was set at rest by the notes exchanged by the American Secretary of State with other governments, which led to the making of the Peace Pact, and by assent of the signatories definitely ruled out the qualifying word "aggressor." In his note of February 27, 1928, to the French ambassador, Secretary Kellogg said: "If, however, such a declaration were accompanied by definitions of the word 'aggressor' and by exceptions and qualifications stipulating when nations would be justified in going to war, its effect would be very greatly weakened and its positive value as a guaranty of peace virtually destroyed. . . . The Government of the United States desires to see the institution of war abolished." And again Secretary Kellogg, after discussing arbitration treaties, said: "We know of but one other form of treaty which can be concluded for the purpose of preventing war

and that is a treaty in which the parties specifically bind themselves not to resort to war. It is this kind of treaty which people have in mind when they discuss treaties for outlawing war, and it is a novel idea in modern international relations."

The universal acceptance of this Peace Pact will make it basic international law. Thereupon it will become unlawful and criminal for any nation to attempt to settle any dispute by force. But so long as war is recognized as lawful and legitimate, the question of "aggression" is irrelevant and the term "aggressor nation" will continue to be merely the epithet which each belligerent nation in self-righteousness hurls at its enemy. If a nation has the legal right, as it always has had, to seek and compel by force the settlement of its controversy with another nation, it is immaterial, except for purposes of public sympathy, which nation strikes the first blow or provokes the first blow to be struck. Under international law hitherto any nation has had the undisputed right thus to resort to war, and be strictly within its legal prerogative. Whatever immediate public opinion or historians later may say about an alleged aggressor nation, the war itself, its legality, its conduct, its destructiveness, its cruelties, are unaffected. Civilization is far more vitally interested in protecting itself against the devastation of war than in determining the intricate question of precise war guilt, that is, of international aggression. The question is thus purely academic except with regard to the theory of sanctions or legalized force.

Used in euphemistic contrast to "aggressive wars" considerable confusion has arisen over so-called "wars of self-defense." But the claim of "defensive war" has too often been invoked as a subterfuge for the "aggressive" use of force. The question of the bona fide exercise of the right of self-defense is placed in the hands of the people by the Pact. Therefore the decision between aggression and the legitimate right of self-defense is lodged with the people. If needed, public opinion may be aided in its decision by clothing the international courts with jurisdiction to hear the facts and determine the questions on the charge of a breach of the Pact. All such hearings should be open to the public and the press, but the court should have no power of enforcement, as this would savor of a super-state. Judicial investigation and publicity would enable public opinion to function more intelligently and effectively. But with war outlawed

and thus with every presumption against a nation resorting to force, public opinion may alone furnish a safeguard of the highest order.

S. O. LEVINSON

See: WAR; WAR GUILT; INTERVENTION; WORLD WAR; OUTLAWRY OF WAR; PEACE MOVEMENTS; DISARMAMENT; LEAGUE OF NATIONS; ARBITRATION, INTERNATIONAL; INTERNATIONAL LAW.

Consult: Hershey, A. S., *The Essentials of International Public Law and Organization* (New York 1927) (see authorities cited p. 150 n.); Kellor, F., and Hatvany, Antonia, *Security Against War*, 2 vols. (New York 1924) (see table, p. 36, and "Aggressions" in index for instances of aggressions); Morrison, C. C., *The Outlawry of War* (Chicago 1927) ch. xii; Madariaga, Salvador de, *Disarmament* (New York 1929); Miller, D. H., *The Geneva Protocol* (New York 1925) ch. x; Williams, Roth, *The League, the Protocol and the Empire* (London 1925) ch. iii; Shotwell, J. T., *War as an Instrument of National Policy and its Renunciation in the Pact of Paris* (New York 1929).

AGIA, MIGUEL DE, Spanish missionary of the sixteenth century. He served on the colonial missions, particularly in Peru and in Mexico, where in 1563 he became professor of theology. He was considered an authority on the Indians, and was frequently consulted by the Viceroy of Peru and the Council of the Indies. He held the treatment of the Indians to be a social, rather than a political or economic problem. Although he believed they were unfit to be placed on an equal footing with the Spaniards, he thought they should find their place in the social scheme of the New World, and be taught their share in its development. The Indians, he maintained, were free men, but the king could justly compel their services for the necessary works of civilization, such as agricultural labor, construction of public works, labor in the mines, the tribute and domestic services for the *encomenderos*. Only in this way could they be taught to overcome their aversion to work beyond the production of bare necessities, and to feel that they were contributing to the progress of civilization. He demanded that the Indians should receive a just compensation for their services, and be assigned to work suitable to their state, with the opportunity of seeking other work to which they might personally be more inclined. He subscribed to Sir Thomas More's division of the day into six hours for work, eight hours for sleep or rest, and ten hours for one's own personal pursuits.

MARIE R. MADDEN

Important works: *Tratado y consulta sobre el servicio*

personal de los Indios (Lima 1604); *De exhibendis auxiliis; sive de invocatione utriusque brachii tractatus, ad Licent. Paulum de Laguna, Suprema Indiarum Senatus Praesidens amplissimum* (Madrid 1600).

Consult: Solórzano Pereira, Juan de, *Politica Indiana* (Madrid 1648).

AGIO, with reference to the exchange of coins or currencies, is the difference between the values of two coins or currencies supposed normally to be equal in value. However, variations within the "gold points" of gold standard currencies are not usually subsumed under this term. Agio develops out of changes in the conditions of supply and demand of the currencies in question from those previously considered normal. After the appearance of an agio, produced by a shifting in the reciprocal demands of nations for each other's products or by changes in the quantities or qualities of the currencies in circulation, it is modified by speculation, which tends either to increase the agio or to restore equilibrium. The course of the German mark between 1915 and 1923 offers a good example. As long as the dealers thought that the mark might be revalorized, speculative buyers and sellers alternately predominated in the market. But in 1923, when all such hopes vanished, people sold marks without restraint and the agio on foreign money increased without limit. This explanation takes no account of adjustments through changes in the balance of payments, which always strengthen the tendency toward equilibrium.

The "self-inflammatory" tendency first becomes a real force in the market when, in addition to the regular dealers, the general public begins to speculate, and it is further strengthened by the substitution of other money for the depreciated legal tender in business transactions. A most important form of speculation due to agio is the purchase of foreign securities or money as a safer store of values. Just as this search for a safe store of values led people to hoard foreign coins and bullion in mediaeval times, so in modern times it causes international movements of capital during periods of monetary disturbance.

Speculation in coins before the establishment of stable currencies under the control of central governments was a common practise, because the frequency of changes in minting standards, the multiplicity of currencies in circulation, the existence of differences even among individual coins and the use of changing "ideal"

standards of value perpetuated a system of interrelated agios. Speculation in coins was further increased, as late as the seventeenth century, by the practise of concealing interest charges through an adverse exchange rate.

In the long run agios are always limited by the real values of the currencies or coins concerned, and any explanation of continuous depreciation in terms of speculation or of "lack of confidence" without reference to progressive inflation is necessarily false.

M. PALYI

See: FOREIGN EXCHANGE; COINAGE; PAPER MONEY; ASSIGNATS; RENTENMARK; INFLATION AND DEFLATION.

Consult: Landry, A., *Essai économique sur les mutations des monnaies* (Paris 1910); Lescure, J., "Esquisse de l'évolution du change et des théories relatives au change" in *Revue d'histoire des doctrines économiques et sociales*, vol. ii (1910) 48-69; Subercaseaux, G., *Le papier-monnaie* (Paris 1920); Wiriath, Marcel, *La spéculation et les troubles monétaires* (Paris 1924); Mitchell, W. C., *A History of the Greenbacks* (Chicago 1903); Kramár, K., *Das Papiergeld in Oesterreich seit 1848* (Leipsic 1886); Walré de Bordes, J. van, *The Austrian Crown* (London 1924); Graham, F. D., "Self Limiting and Self Inflammatory Movements in Exchange Rates; Germany" in *Quarterly Journal of Economics*, vol. xliii (1928-29) 221-49.

AGITATION. The word agitation is variously employed to mean a phase of a social movement and to specify a method of collective influencing. Conceived as a method, there is no consensus in distinguishing it from propaganda, non-violent coercion and kindred concepts. To avoid confusion the term is here taken to refer to that phase of a social movement which is characterized by the spontaneity with which a collective ideology is propagated and accepted. A social movement arises when common emotional dispositions find expression in a new system of symbols which condemns things as they are and prescribes what they ought to become. A social movement is consummated and reaches the phase of organization when it has passed through this agitational period and produced rather permanent alterations in the practises of society. Democratic, labor and nationalist agitations have figured most conspicuously in recent history.

When individuals are thrown into circumstances in which their claims on society are threatened or thwarted, they may identify themselves with one another and demand collective justice. Identification does not necessarily arise, however, and a man thrown out of employment may regard it as a purely private

affair with his employer. Identification is a process by which affections are guided by perceptions of similarity. Emotional relations within a large group become possible by interlocking identifications among those in visible contact, and by the sharing of symbols of the whole.

Society witnesses the competition of old and new ideologies for the allegiance of the dissatisfied. An agitation appears when many of the malcontents in a community are excitedly considering a new ideology as the symbol of their protests and demands. A satisfactory symbol system is a compromise formation in which the diverse affective drives of the discontented find expression. Since one of the wants of man is the justification of the rest of his wants, a demand for bread or ballots must be buttressed by a demand for justice. The appeal for justice is an appeal from one authority to another, and the laws of God or Nature or Historical Necessity may be invoked against the laws of man. The defiance of authority is associated with feelings of guilt and a desire for expiatory punishment, and protest ideologies gratify this craving to do penance by stressing the sacrifices necessary to reach the promised land.

In the agitational phase of social action men are willing to die for their convictions, and to forsake family and dependents in the service of the cause. Sectarianism thrives, and the true believers hesitate to mingle socially with the unbelievers, cultivating distinctions of vocabulary, dress and decorum. This is the era of prophets, apostles, heroes, martyrs and saints. Persistent persecution from the authorities provokes conspirative tactics and possible violence. On the whole the spreading of the new gospel proceeds with a minimum of tactical premeditation and with a maximum of joy in sharing a new revelation.

The transition from agitation to organization tends to occur even though society has made few of the concessions demanded. The tactician substitutes for the prophet, and the bureaucrat for the enthusiast; religion becomes magic, and ideology becomes phraseology. Sectarianism diminishes, and points of dogma and method become debatable, thus permitting the existence of a public opinion within the group and within the community of which the group is a part.

One function of agitation is to organize social energy for social change. But it may produce no substantial alteration in society, and serve entirely as a formation by means of which the

impaired self-feeling of a group is compensated. It is symptomatic of deep lying difficulties in adapting human impulses to a given set of cultural conditions, and it also implies a long antecedent process during which authoritative symbols have been de-valued.

HAROLD D. LASSWELL

See: COLLECTIVE BEHAVIOR; SOCIAL PROCESS; SYMBOLISM; PROPAGANDA; VIOLENCE; MOB; RIOT; STRIKE; BOYCOTT; ASSEMBLY, RIGHT OF; FREEDOM OF SPEECH AND OF THE PRESS.

Consult: Mayreder, R., *Der typische Verlauf sozialer Bewegungen* (2nd ed. Vienna 1926); Geiger, T., *Die Masse und ihre Aktion* (Stuttgart 1926). ON AGITATIONAL PHASES OF SOCIALISM, NATIONALISM AND RELIGION: Man, H. de, *Zur Psychologie des Sozialismus* (2nd ed. Jena 1927), tr. by Eden and Cedar Paul (London 1928); Hayes, C. J. H., *Essays on Nationalism* (New York 1926); Leuba, J. H., *Psychology of Religious Mysticism* (London 1925).

AGNATIC RELATIONSHIP. *See* KINSHIP SYSTEMS.

AGOBARD (c. 779-840), archbishop of Lyons. Contemporary with Hrabanus Maurus and overlapping in youth the life of Alcuin and in old age that of Hincmar, he participated with this earliest group of mediaeval publicists not only in developing the claims of the church but also in producing that conjunction of classical political forms with barbarian social and political institutions, attitudes and customs which remains the base of modern political theory. He was not a systematic writer, and his literary remains are in the form of short dissertations and letters. He accepted the patristic view that since men were naturally equal, only sin justified slavery. He protested therefore against the denial of baptism to slaves without the master's consent, arguing that the inner man was subject only to God. He maintained firmly the authority of the church even over princes: the sacred canons of the church, "confirmed by the spirit of God, by the assent of the entire world, by the obedience of princes, by the agreement of the Scriptures," held for all men alike, and to act against them was to act against God and His universal church. The most remarkable quality of Agobard's thought was his detachment from some of the characteristic beliefs and institutions of his day, such as witchcraft, magic, trial by ordeal, and the worship of images.

ROBERT T. CRANE

Works: *Agobardi opera*, ed. by Papire Masson (Paris

1605), ed. by Etienne Baluze, 2 vols. (Paris 1665-66); letters in *Monumenta Germaniae historica: Epistolarum*, vols. i-vi (Berlin 1891-1902) vol. v, p. 150-239. Consult: Ebert, Adolf, and others, *Allgemeine Geschichte der Literatur des Mittelalters*, 3 vols. (Leipsic 1874-87) vol. ii, p. 209-22; Carlyle, R. W. and A. J., *A History of Mediaeval Political Theory in the West*, vols. i-v (Edinburgh 1903-) vol. i, pt. iv.

AGOULT, CHARLES D' (1747-1824), French writer on political and financial subjects. He was made bishop of Pamiers (France) in 1787, emigrated at the beginning of the revolution and returned to France in 1801 after having renounced his bishopric. Later he refused the portfolio of minister of finance, offered him by Louis XVIII.

Strongly influenced by Montesquieu and Burke, he declared himself against popular sovereignty and in favor of the ideas of the historical school. However, he advocated a limited form of constitutional monarchy (*Lettres à un Jacobin, ou Réflexions politiques sur la constitution d'Angleterre et la charte royale*, Paris 1815). His more original work is revealed in his financial pamphlets, although even in this field he profited by neomercantilist doctrines

and by the experiences of Law and of the Bank of England. In 1815 he resumed work on a *Projet d'une banque nationale* (Paris 1815) which he had already proposed to Louis XVI at the beginning of the revolution as a means of gradually reabsorbing the *assignats* (q.v.). In his *Eclaircissement sur le projet d'une banque nationale* (Paris 1816) he energetically denounced the lack of specie from which France was suffering and the necessity of providing for it by issuing paper money based on a mortgage on the land, to be payable in ten years. He expected that in order to satisfy the needs of industry and trade a considerable part of this credit currency would continue to circulate even after the decade had elapsed. To insure the service of the debt thus contracted, d'Agoult proposed to replace the direct tax, especially the direct land tax, by consumption taxes. In his opinion a system of taxes on expenditure rather than on income would possess all the essential merits of equity, convenience and fiscal productivity (*Des impôts indirects et des droits de consommation*, Paris 1817).

PAUL HARSIN

AGRARIAN MOVEMENTS

I. INTRODUCTION.....	ALVIN JOHNSON
II. CLASSICAL ANTIQUITY	
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Rome	PAUL LOUIS
III. GREAT BRITAIN.....	J. L. HAMMOND
IV. WESTERN EUROPE	
France	HENRI SÉE
Germany and Austria.....	HENRI SÉE
Italy.....	HENRI SÉE
Denmark.....	FREDERIC C. HOWE
V. EASTERN EUROPE	
East Central Europe and the Balkan Countries	IFOR L. EVANS
European Russia.....	A. MEYENDORFF
Poland and Lithuania.....	ESTHER R. MANGEL
Latvia and Esthonia.....	ESTHER R. MANGEL
VI. UNITED STATES.....	BENJAMIN B. KENDRICK
VII. LATIN AMERICA.....	GEORGE MCCUTCHEEN MCBRIDE

I. INTRODUCTION. Throughout the history of civilization town and country have presented contrasts, not easily definable, in ways of living, in manners and morals, in conceptions of fundamental values. In static social periods these contrasts manifest themselves in social and economic friction having no significant political consequences. Until very recent times the manners and speech and dress of the countryman made of him a butt of ridicule for the towns-

man. Until recently, also, the prevailing rural view of the townsmen was that they were idle wasters, sharpers, parasites upon the husbandman's honest toil. In the exchange of products or services between town and country there were much bickering and incessant complaints of trickery. The townsman was most frequently accused of charging exorbitant prices, the countryman, of putting his best apples at the top of the barrel or selling in the town products

of dubious history, like contaminated cream or diseased meat. A solidarity of opinion condoned the vices of the one side and exaggerated the vices of the other, emphasized the virtues of the one and reflected doubt upon the virtues of the other. Town and country represented antagonistic cultures, each so tenacious of its own ways that language and manners often drifted far apart, as in the remotely analogous case of nation building.

In the last three quarters of a century compulsory education, by imposing universal standards of speech, has worked powerfully toward the obscuring of the cultural divergencies of town and country. Universal military service has exerted a similar influence in continental Europe. Above all, the modern economic process, with its easy transportation penetrating even the remotest rural districts, its standardization of consumption, of manners, speech, ideas might seem destined to obliterate altogether the lines between town and country. In fact, however, the lines of cleavage cut deeper than the superficial cultural manifestations. So long as the countryman faces nature directly, engaged directly in the work of production, while the townsman meets nature through the intermediation of "business," the distinction between country and city may be expected to persist. When agriculture becomes essentially capitalistic, as in some parts of the United States and other countries of extensive land resources, or in the plantation zones of the tropics, the contrast of country and town disappears and the class struggle assumes a form analogous to the class struggle in industry.

Within the country society as within the towns, conflict of classes may emerge: small proprietors against large, tenants against landlords, hired laborers against owners of estates. These conflicts contrast sharply with the general conflict between town and country interests which characterizes a true agrarian movement. In some instances, it is true, what appears to be merely a struggle between different rural elements is essentially an agrarian-urban conflict. Thus an anti-landlord movement wears a true agrarian character when the landlords as a class are absentees or, if not absentees, nevertheless assimilated to urban life. The owners of the latifundia, to whom tradition ascribes the ruin of ancient Rome, lived in the cities, leaving their estates to the management of *villici*. In the ancient regime of France the

large landowners were urbanized in culture; many of them lived continuously in Paris or in provincial cities. The Irish landlord of the eighteenth and nineteenth centuries spent most of his time in commercial and industrial England.

Genuine rural class struggles have no strict relevance in a study of agrarian movements. In any historical discussion, however, it is inexpedient to draw lines too sharply. Interclass rural conflicts, agrarian problems as viewed by the statesman, and self-conscious agrarian movements, while easily distinguishable in theory, form in history a closely woven texture which is difficult and profitless to unravel. In the sections that follow the subject is treated broadly, in order to cover the related group of rural problems popularly described as agrarian.

True agrarian movements have arisen whenever urban interests have encroached, in fact or in seeming, upon vital rural interests. Such encroachment may take the form of the absorption of the better agricultural lands by urban wealth, through violence as in Ireland, legal chicanery as in nineteenth century Mexico, the superior bargaining power of groups trained in trade, or by a combination of all three, as in England of the seventeenth and eighteenth centuries. Often such encroachment is of long standing, apparently accepted throughout generations. In such cases the emergence of an agrarian movement appears like a revolutionary infection, instead of the natural expression of agrarian ideals and sentiments. An instance is the widespread movement against the large landholders of eastern Europe in the late nineteenth and early twentieth centuries. Although the immediate cause of these movements was the distress which resulted from land reforms, it is improbable that the peasant had ever, in fact, accepted willingly his tributary position.

Another point at which the vital interests of the country have come into conflict with town or city centers is money lending. Especially in pre-capitalistic societies the loan contract has run in terms disadvantageous to the cultivator of the soil. He has been prone to borrow at usurious rates, being untrained to calculate properly the actual burden of the interest or his ability to repay. Whole communities have thus come to be saddled with debt, and have developed a common hatred of the money lender and the town society which he repre-

sents. This hatred becomes all the more violent when racial, national or sectional differences add weight to the social-cultural differences of country and town. Agrarian rage against usury provided a sinister background upon which religious and political fanaticism inscribed the vengeance of Kurdish shepherd and Turkish peasant against the Armenians. Antagonism to the alien British money lender was abundantly in evidence in the inchoate agrarianism of the American South in the early decades of independence. "Eastern Capital" was a bugaboo of mid-western agrarianism of the greenback and Farmers Alliance period.

A third point at which the conflict of urban and rural interests gives rise to agrarian movements is the distribution of the burden of taxation. Before the American Civil War the agricultural South was violently opposed to the tariff, holding it to be a means of taxing the South for the benefit of northern industry. The principal issue in modern agrarian movements, however, is that of prices. With the progress of the commercial and industrial system the country districts fall away from their primitive self-sufficiency and come to depend more and more upon a general market for the disposal of their products and the procuring of necessities of consumption and production. This occurs first of all in such staples as tobacco and cotton, where direct consumption is negligible. With improvements in production the range of commercialized agricultural production extends, until virtually the whole product of extensive farming districts finds its way to the market. The matter of prices becomes vital to the life of the rural community.

In the circumstances agrarian sentiment fastens itself now upon one feature of the commercial system, now upon another. The most general features of attack are the "middleman," who makes his profit, according to prevailing rural opinion, by depressing the price to the farmer and raising it to the urban consumer; the speculator, who emphasizes the spread of prices; the transportation agency, which takes, it is assumed, an exorbitant share of the product in return for carrying it to market. Similarly the middleman is charged with an unconscionable inflation of the prices the farmer has to pay for his supplies.

Out of this antagonism to the agencies of trade and transportation has arisen an agrarianism throughout western civilization which seeks to arm itself with either political or economic

weapons, or both. On the political side there is a ceaseless agitation, sometimes more or less successful, for the restriction of speculation, the control of railway rates, elevator charges, and the like. On the economic side there is a movement toward cooperative organization in the sale of products and the purchase of supplies. American agrarianism has been mainly political. The European agrarian movement has won its chief victories through cooperation, although it has also availed itself of political means, as in Denmark, where agriculture is not only thoroughly organized cooperatively, but also has bent the resources of the state to its ends in the control of railway rates, in taxation and in the provision of cheap credit for the establishment of farm ownership.

On occasion agrarianism has struck out against more abstract forces, like the appreciation in the value of money and the consequent fall of prices that attended the resumption of specie payments after the Civil War; the worldwide rise in the value of gold in the quarter of a century from 1870 to 1895; the credit deflation after the World War. While the greenback, free-silver and antideflation movements were not exclusively agrarian, they drew their chief strength from agrarianism.

Since the time of Colbert agrarianism has frequently fixed its chief interest upon tariff policies. During the eighteenth century the agricultural interest succeeded in fixing on the statute books of England a succession of laws designed to check the importation and facilitate the profitable exportation of corn. Especially since the middle of the nineteenth century, when the competition of the virgin lands of the American West began to make itself felt severely, European agrarianism has been decidedly protectionist. Agricultural duties have been a primary demand of the agrarians in all western Europe. In the United States the general agrarian approval of protection as a means of creating a domestic market was supplemented, in the period following the Great War, by a demand for direct protection, to be made effective through what amounted to an export bounty.

Varying as is the content of agrarian demands in differing circumstances, certain characteristics appear to be fairly general. However definite its material objectives, agrarian agitation promptly assumes a moral color. A semi-mystical sense of the paramount importance to humanity of agricultural production is every-

where manifest. Hence an agrarian movement under way is almost always characterized by violence of thought, and often violence of action. In spite of this interpolation of moral attitudes—or perhaps because of it—most agrarian movements are short lived. The emotions burn themselves out, leaving an aftermath of negativism and discouragement. Even at the present time, with agriculture extensively commercialized, there is the sharpest contrast between the ebb and flow of agrarian sentiment and the remorseless pursuit of political interests characterizing industrialism.

Most agrarian movements in history have been confined to areas limited relatively to the political system within which they have operated. This fact has most frequently foredoomed them to failure. When they have attained to partial success, the explanation commonly lies in the fact that non-agricultural forces have been enlisted to give dramatic coherence and cogency to agrarian demands, as in the case of the French physiocrats or the lawyers of the old South. Or else agrarian demands have been taken over by statesmen as essentially in the general interest. Thus agricultural protection in countries like France and Germany won the effective support of statesmen in the interest of national self-sufficiency in peace and war.

Agrarian movements are often bracketed with the labor movement in its various forms—trade unionism, social democracy—as parallel manifestations of the democratic movement of the times. On the whole, however, the contrasts between the two movements appear more marked than the analogies. The typical laborer owns little besides his hands; the typical member of an agrarian movement owns land and home, or at least holds a quasi-permanent tenure. The economic status of participants in the labor movement is roughly the same: in agrarian movements the rich farmer and the poor stand shoulder to shoulder. The conception of self-sufficiency has never been lost by the farmer; it has never been cherished by the laborer. The objective of the labor movement is simple and intelligible—to secure higher wages for shortened hours of toil. The agrarian objectives are abstract, undefinable, elusive. When the laborer has won in a struggle with the employer he carries away his winnings in his pocket. When the farmer has secured a law against usury or speculation, the probabilities are that usury and speculation change

their masks and come back into the market place. The labor movement admits of close and tenacious organization, capable of persisting through generations. An agrarian movement is held together by a moral fervor that cools.

Attempts have been made in various times to unite the agrarian and the labor movement for both economic and political ends, but the most extensive experiment in this direction, the composite peasants' and workers' government of Soviet Russia, has involved endless friction. In America the Knights of Labor, the Farmers Alliance, the Farmer-Labor party, have attempted to effect consolidation of agrarian and labor interests for the advancement of political policies. The permanent results of such combinations have not been notable.

In the following sections of this article the agrarian movements of the several periods of history and the several modern states have been traced upon the institutional background. No attempt has been made to attain to comprehensiveness, since a comprehensive history of agrarian movements in all their forms would represent a major section of the history of human culture. Neither has any attempt been made to establish a schematic unity, since unity would necessarily be misleading in the handling of such varying material. The more significant facts have, however, been assembled, to make possible a conspectus of the agrarian factor in its relation to social-political institutional development.

ALVIN JOHNSON

II. CLASSICAL ANTIQUITY. *Greece.* In ancient Greece, as in all primitive societies, the problem of land distribution was primary, and throughout Greek history formed the basis of all agrarian disturbances. For a long time cultivation of the soil, if not the only form of economic activity, surpassed all others in importance. At the same time the land was limited in extent, mountainous and unfruitful, and it was inevitable that struggles for its possession should develop among cities as well as between classes. Indeed these struggles, more than any other single problem, dominated the history of Athens, Sparta, Corinth and most of the other Greek cities.

In the earliest period of which we have record land ownership was vested in "families." But in those times the family, with its chieftain and numerous membership, resembled a minia-

ture people. Several of these families in each section of the country controlled the land. A family group gathered about it clients, actually serfs, who worked in exchange for protection, shelter and subsistence. The few slaves were a minor element in the situation, for slavery did not develop on a large scale until later, as a result of war and piracy, criminal conviction and non-payment of debts. The outlines of this early society are drawn for us in the *Odyssey*.

In the eighth century the older organization was superseded by one in which the aristocracy rose to power at the expense of the kings. The laws of Lycurgus in Sparta marked this change. During this period the aristocracy in each city was a minority group, composed of large landholders; at Epidaurus, for instance, one hundred and eighty men constituted the body politic, while still fewer held power at Heraclea, Cnidus or Thera. This first revolution, however, was followed by another in which undivided estates and that right of primogeniture which had formed the foundation of family organization were abolished. Thus the patriarchal family broke up into smaller groups.

At the same time the clients were struggling to improve their condition. They demanded freedom from their bondage to the family and from their obligation to surrender to it the entire yield of their labor. After innumerable conflicts, extending over many years, they achieved a degree of independence in which the master received only a part of what the client extracted from the soil. But that part the client still considered too large, especially as it was arbitrarily fixed, and he was constantly threatened with slavery in case of failure to discharge his obligations. So for four or five generations he fought sturdily for complete emancipation.

In Athens the men of the upland (*Diacriéis*) gained their freedom earlier than the men of the plain (*Pediéis*). The importance of the laws of Solon (sixth century B.C.) lay in the modification of property rights which they effected in Athens. Thereafter the debtor, when a free man, could no longer be enslaved for debt, for his liability was limited. In effect the land became free. "Those who, on this earth, suffered cruel servitude and trembled before a master, them have I set free," said Solon. But Athens was not all Greece and even at Athens complete equality was not achieved.

Sparta's policy was as peculiar in the agrarian

domain as it was in all others. No society was a more complete hierarchy, and if equality existed it was only in a very narrow ruling class. The ideas that Lycurgus had imposed on his few followers who conquered Laconia and Messenia were relatively simple. The aristocracy was like an army encamped on the land; it possessed lands that were inalienable, transmitted from first-born to first-born; 250,000 helots or serfs and 100,000 free men worked for it. The helots were really slaves of the state; they cultivated the land under condition of payment of a fixed sum to the owner, and it was by their labor that he and his family were maintained. Some tribute, too, came from the free men who lived near the borders of the state. One can easily understand that the Spartans lived in constant fear of helot insurrections.

Throughout the classical period, there was in all Greek cities a clear tendency toward concentration of property; and this concentration resulted in a proportionate increase in the number of slaves. In order to avoid disturbances the cities at this time encouraged their surplus landless citizens to colonize Sicily, southern Italy and regions along the Black Sea, or in Thrace. However, although concentration of land in large holdings occurred throughout Laconia, in Attica small holdings continued to exist for many years, and one still found there the small landowner or *thetes* who harvested less than 104 hectoliters of grain and less than 78 of wine or of oil. It was not until the destruction of vineyards and olive orchards during the Peloponnesian wars and the subsequent sales of land by needy debtors that land concentration began in Attica as well.

In the Greek cities where only a small portion of the population owned property either in law or in fact, it is not surprising that the dissolution of the great families should have been the signal for war between rich and poor. In the fifth century B.C. this struggle was everywhere at its height. The insistent demands of the poor for the cancellation of debts and the distribution of lands were the source of the long succession of riots and revolutions, lasting until the Roman conquest, which so facilitated the subjugation of Greece. At Megara and at Samos the property of wealthy families was confiscated and distributed. After the death of the tyrant Dionysius a general redistribution took place at Syracuse. At Messina the landed aristocracy was despoiled. From time to time the people set up dictatorships or tyrannies

which overthrew the existing systems of land ownership—dictatorships such as those of Aristodemus at Cumae, Nicocles at Sicyon and Aristomachus at Argos. Notwithstanding the silence which marks its internal history, Sparta, according to Thucydides, was well acquainted with revolutions of this kind. In the fifth century King Agis proclaimed the distribution of the lands of the plutocrats and was assassinated. Two hundred years later, Cleomenes attempted to achieve a similar reform throughout the Peloponnesus; but at his death this movement also was crushed. Within a short time another popular leader, Nabis, gained power, and likewise decreed a redistribution of land in the Peloponnesus. He was opposed by the aristocratic Achaean League, which appealed to Rome, and Nabis, like his predecessors, was assassinated. Thus to the very end agrarian conflicts dominated the history of free Greece.

PAUL LOUIS

See: SLAVERY; DEBTORS, RELIEF OF.

Rome. The history of agrarian evolution and of agrarian movements in Rome resembles that of Greece in its main outlines. In the early years the land was held without subdivision by the great families, or *gentes*, who cultivated it with the help of their clients, serfs attached to the soil. Somewhat later subdivision of property occurred; but while the great noble families enjoyed quiritarian ownership and full property rights, the plebs held only a precarious title to their small parcels of land. Roman territory, and consequently available land, was limited in this early period. There was as yet no need for many slaves; Dionysius of Halicarnassus mentions only 17,000 in 476 B.C. In succeeding years, however, this slave population was augmented by war, by convictions for crime and by the enslavement of insolvent debtors, and slave revolts broke out in 501, 498, 497 and 419 B.C.

Up to this time most owners had cultivated their own land. The leaders of the *gentes* followed the plow themselves and but few of them lived in the city. Holdings were relatively small; in the sixth century, when there were approximately 8000 quiritarian proprietors and 8000 tenants at will, five hectares was a large holding, and one fourth of a hectare was average size. But the extension of Roman conquests resulted in the formation of the *ager publicus*, a public domain, and these lands the patricians attempted to appropriate. Servius made an ini-

tial distribution of the land which satisfied the poor, but in the sixth and fifth centuries the nobles renewed the struggle and gained possession of the *ager*. Indeed they no longer paid even the rent charges which theoretically devolved upon them.

The fourth century marked the appearance of very large holdings. The war with Carthage had enriched the patricians and ruined the rest of the population, and numbers of small holders were obliged to sell their land in order to pay their debts. Most of these small holders became share tenants. The formation of these large estates alarmed conservatives who feared popular insurrections and dreaded the passions of a floating populace unattached to the soil. It was to save the state from such dangers that Spurius Cassius (consul 486 B.C.) had demanded a new distribution of the *ager*. Throughout the next two centuries one such agrarian project succeeded another. Icilius distributed acreage on the Aventine among the poor; in 366 the Licinian laws reduced the maximum of *ager* that a citizen might hold to 125 hectares, limited the number of cattle that one individual might graze on the *ager* and promised a redistribution of land to benefit all citizens. But these laws, too, remained futile.

Then followed the period of the great conquests and the struggle between the classes, patricians and plebeians, became intensified. By 46 B.C. the territory of the Roman Empire was more than a hundred times greater than it had been in 264 B.C. The patricians were exploiting veritable latifundia, with armies of slaves. In 190 B.C. Italian agriculture employed a million and a half slaves, who from time to time throughout the succeeding century were involved in formidable revolts (198, 196, 185, 140 B.C.). As Sallust said, conquest had ruined the poor. The small landholders were continually compelled to sell their holdings, for the conquered countries provisioned Italy at low prices. Expropriations became increasingly brutal. Plutarch tells us that the free peasant disappeared in the second century.

It was during this period that the Gracchi rose to power. Were they revolutionaries? They tried to subdue the agrarian plutocracy and to restore the old order of society, based on a more equal distribution of the land. In 133 B.C. Tiberius Gracchus again put into force the Licinian laws limiting occupation of the *ager* and providing for reversion to the poor of land thus freed. He was assassinated. Ten

years later his task was vainly resumed by Caius. The Thorian law of the year 111 B.C. legalized the seizure of the *ager* by the aristocracy and suppressed the payment of all rents for the land. Small holdings were indeed dead. Attempts to reestablish them in Italy and elsewhere resulted in failure, for owners of small parcels of land, since they were unable to compete with the *latifundia*, hastened to sell their holdings.

The *latifundia* increased in size under the empire. *Coloni* succeeded slaves because the large landholder found the *colonus* less burdensome. Slaves were expensive to buy and expensive to feed, while the *colonus*, the ancestor of the feudal serf, not only was bound to the soil but also paid dues. The institution of the *colonate*, which was already in use among the barbarians, was praised by Tacitus and Columella. The emperors encouraged the great landowners to grant personal liberty to their slaves in exchange for payment of a fixed or variable sum, while the small landowners who reappeared or survived looked to the powerful owners for protection. Barbarians who settled on the frontiers in the time of Vespasian and Marcus Aurelius received lands which they worked as *coloni*. Thus the institution developed.

But the new regime only temporarily revived agricultural prosperity. About 250 A.D. Italy was seized by a tremendous agricultural depression; taxation crushed the farmers and uncertainty darkened their lives; peasant insurrections broke out. Other disturbances occurred when the scarcity of supplies caused an unprecedented rise in prices, and the land was deserted because the tiller of the soil received prices insufficient to cover his costs. The empire was ripe for destruction.

PAUL LOUIS

See: SLAVERY; SERFDOM; DEBTORS, RELIEF OF; PUBLIC DOMAIN; LATIFUNDIA; COLONATE.

III. GREAT BRITAIN. In the Middle Ages village life was very much the same over most of western Europe. "Everywhere," says Sir William Ashley, "half or more of the tilled land was in the hands of small peasant cultivators. The terms on which most of them occupied their holdings were indeed onerous, and we must take care not to depict their condition in colors too rosy. Yet there they were alike in Central and Northern France, in Southern and Middle England, in Western and Cen-

tral Germany." For our purposes the important features of mediaeval society were the obligation of poor peasants to give bodily labor to their lords, and the fact that in addition to the land cultivated by the peasants there was common waste used by both lord and peasant for pasture. The history of the peoples of western Europe since the Middle Ages is largely the history of the transformation of this common type of society into the different societies that we know today.

The revolts of the agrarian poor in English history are all connected with this transformation. They fall into three classes. The first revolts are revolts against the oppression of the lowest class of cultivator, the villein, by the great lord. The process of commuting bodily services for a money payment began much earlier in England than on the continent. The Black Death in 1348 created a great social disturbance by reducing the population, and since laborers were then scarce, the emancipated peasant demanded higher wages for his labor, and the villein still in bondage grudging services that were now in greater demand than ever. The landlords met this pressure by the Statutes of Labourers, fixing wages, and by trying to check further emancipation. The Peasant Revolt led by John Ball and Wat Tyler in 1381 was the result.

The second kind of revolt is the revolt against the attempt of the lord to enclose the common waste. The disorder of the sixteenth century, illustrated by the rebellion led by Robert Ket in Norfolk in 1549 was provoked by the conduct of the nobles, who enriched themselves by the plunder of the monasteries, and whose avarice had been further excited by the opportunity of making great wealth out of the expanding trade in wool. A gradual process of enclosure of fields by small owners was also going on, particularly in the south of England; and throughout the sixteenth century enclosure and depopulation were subjects of frequent political debate. Enclosure was fiercely denounced by Latimer and criticized by More and Bacon. Parliament put only a slight check on the process. In the eighteenth century there was a further powerful enclosure movement under the influence of the demand for scientific agriculture. As the landlord class was supreme it is not surprising that the smaller peasants, the cottagers and laborers, came off badly in this revolution. It was the fashionable belief of the time that a landless laborer was the best laborer.

Little care therefore was taken of his interests. Cottagers and small farmers who had maintained themselves by their common rights sank into the position of wage earners, without property of any kind. The transformation of the old manorial system was complete and English agrarian society consisted of landlords, tenant farmers and laborers.

The agrarian movements of the nineteenth century were revolts of laborers against low wages and bad social conditions. The Napoleonic wars brought high prices and great suffering. The ruling class, finding that the laborers could not live on their wages, rather than fix a minimum wage, adopted a plan by which laborers' wages were augmented from the public funds in proportion to the number of their children (see ALLOWANCE SYSTEM). From this plan there developed various schemes for public employment; the overseers of the poor used to hire out laborers, and in some places laborers were put up for auction. This plan, benevolent in intention, led to the creation of something like a serf class in southern England. Distress and humiliation produced in the southern counties in the winter of 1830 a rising which was suppressed without difficulty and punished with sensational severity—some five hundred men being transported to Australia.

Unions were formed among the agricultural laborers in the eighteen-thirties when the Owenite movement was spreading, but their spirit was crushed in 1834 when six Dorsetshire laborers were transported for taking illegal oaths in accordance with an old fashioned ritual. In the same year the old Poor Law was reformed, and the able bodied laborer was offered the workhouse if he needed help from public funds. The result was a slight rise in wages and the increasing employment of women and children. For forty years the laborer accepted his position. Not only did the conditions of his life and work make combination very difficult, but in the village he had against him farmer, parson and landlord. In the early seventies, however, Joseph Arch succeeded in creating and sustaining for some time a strong agricultural laborers' union. At one time it had almost 100,000 members, and under its pressure wages were raised and conditions improved. But the farmers, supported by the clergy and landlords, with a few distinguished exceptions, organized to destroy the union, and succeeded in weakening it by means of a lock-out. Then came the great agricultural depression; arable

farming declined in favor of pasture, and less labor was needed; by 1881 the union had sunk to 15,000 members, and it was chiefly occupied in helping laborers to emigrate.

The extension of household franchise to the counties in 1884 was followed by legislation, favorable to the laborers, on parish councils, allotments and other questions; and a few years before the war a new spirit of hope was excited by a great Liberal campaign. When the war broke out new unions had been formed and demands were being pressed for a minimum wage and a weekly half holiday. After the war the laborers gained a great advantage in the establishment of an Agricultural Wages Board with wage committees in different counties. Unionism rapidly increased. In 1921 the government repealed the Corn Production Act with its guaranteed prices to the farmer and abolished the Wages Board. But in 1924 the Labor government set up another Wages Board on which representatives of laborers meet the employers' representatives on the district committees as equals. Thus, although wages are still very low, the laborer has acquired a status that he previously lacked.

Irish history presents a complete contrast to English history. In Ireland the agrarian movements have always been peasant movements, for the Irish peasant kept his hold on the soil. The framework within which the struggle went on was the English land system planted on Irish soil. But in the English system the landlord supplied capital and guidance; in Ireland he supplied neither. He was a rent receiver, usually making his home and career in England. (Maria Edgeworth's novel *The Absentee* was written to touch the conscience of these Irish landlords in London.) The Irish peasant consequently looked elsewhere for leadership, and Daniel O'Connell made him a political power. A series of agrarian movements beginning with O'Connell's campaign, and taking different forms under different leaders, compelled the British government to reform the system, banishing, as it was said at the time, political economy to Saturn. The history of land reform in the nineteenth century is the history of the modification of that system in the peasant's favor by Gladstone's successive land acts, which set up fair rent courts and recognized tenant rights. This was but a stage in a revolution, for it was followed by the use of state aid to enable the peasants to buy their farms.

Scottish history has something in common

with English and something in common with Irish history. In the lowlands the agrarian system resembled the English; in the highlands, the Irish. There the typical holding was the crofter holding, and the crofters were as much attached to their land as the Irish peasants. But they were swept away in great numbers by two invasions: the invasion of the sheep breeder and the invasion of rich men who wanted to make great deer forests for sport. The first was denounced by Sir Walter Scott in a famous passage about the unrelenting avarice which was draining the highlands. The evicted crofters emigrated or settled in Glasgow and the towns of the Clyde, where they fostered passionate memories of their wrongs. The process was practically unchecked until the eighties when Gladstone set up a Crofter Commission. The wrongs of the crofters began then to excite widespread sympathy, and Gladstone's government passed an act in 1886 giving security of tenure and fair rents to the crofters in seven counties. Just before the war the Liberal government, after a severe struggle with the Lords, extended the principle of this act to all Scotland.

J. L. HAMMOND

See: MANORIAL SYSTEM; SERFDOM; BLACK DEATH; LABOURERS, STATUTES OF; ENCLOSURES; POOR LAWS; ALLOTMENTS; SMALL HOLDINGS; WAGE REGULATION; ABSENTEE OWNERSHIP.

IV. WESTERN EUROPE. *France.* Throughout western Europe the manorial system, with its hierarchy of ownerships and system of common cultivation, was firmly established by the tenth or eleventh century. But by the fourteenth century peasant tenure in most parts of France, even within the manorial system, had become virtually an independent ownership, encumbered only by manorial rights and royal taxes. During the early period peasant revolts were infrequent, occurring only when situations were particularly unbearable, as at the time of the rigorously suppressed *Jacquerie* of 1358. Beginning in the twelfth and thirteenth centuries, however, there developed in most parts of the country a powerful movement for the emancipation of the serfs. The unrest caused by this movement combined with particular cases of oppression by the noble classes to produce a series of peasant revolts in the succeeding centuries. Of considerable seriousness were the movement of the *Tuchins* in the South (1380-83), the revolts of the *Croquants* during the devastations of the religious wars at the end of the sixteenth century, and the revolt of the

Nu-Pieds of Normandy in 1639 after an excessive levy of taxes. Even the reign of Louis XIV was marked by troubles, principally in Lower Brittany, where the revolt of the *Bonnets Rouges* (1675) took on the aspect of a real peasant uprising against the domination of the nobles. But from the beginning of the eighteenth century until the outbreak of the revolution no peasant movements disturbed the peace of the country, although the burdens of the feudal regime do not seem to have been diminished, but were, if anything, increased, especially after 1750.

That dissatisfaction and strong antagonism existed beneath the surface, however, became apparent on the outbreak of the revolution. Throughout these later centuries seigniorial authority was exercised directly not by the lord himself, even when he lived on his estate, but by his officers in charge of the administration of the domain. The residence of the noble on his estate rather than in the city had little effect on the attitude of the peasants; and the belief that in the Vendée or in Brittany relations were more cordial than elsewhere is without adequate historical foundation. For in all parts of France, at the time of the summoning of the Estates-General, those peasants who could make themselves heard in the local *cahiers* demanded the mitigation of the manorial regime, protested against its abuses and asked for the redemption of the most burdensome dues.

This attempt at governmental reform was early complicated by the release of agrarian discontent. One of the consequences of the fall of the Bastille was the *Grande Peur*, a widespread and unorganized peasant movement which resulted in the burning of chateaux and of records and in considerable terrorism. As a result the National Assembly passed the decrees of August, 1789, and of March, 1790, which abolished without indemnity the right of mortmain, hunting and fishing privileges, *banalités* and tolls, and made redeemable the other manorial dues, though on conditions that were onerous for the peasants. Hence serious disturbances again broke out. But after the events of the tenth of August, 1792, agrarian legislation became increasingly democratic in character; until finally, on the seventeenth of July, 1793, the Convention abolished without indemnification all feudal dues. This was the complete and definitive legal abolition of the manorial regime. The subsequent sale of the national domain, first the land of the clergy,

then that of the emigrés, contributed considerably to the increase of peasant ownership. Although it was of particular benefit to the more prosperous peasantry, it also enabled the hitherto landless groups to acquire some property.

Throughout the nineteenth century the characteristic small peasant holdings persisted in France side by side with large and middle sized holdings, to such an extent that on the eve of the World War only 36 percent of the soil was cultivated by large farmers and metayers. Agriculture, still rather primitive up to 1840, developed rapidly in the second half of the century, largely as a result of progress in the means of communication. A serious agricultural depression which began in 1875 and lasted until 1896 led to a series of protective tariff measures which resulted in a rise in prices especially advantageous to the large landholders. But agrarian policy throughout the century was dominated not by the pressure of agrarian movements, for there were none, but by considerations of national welfare.

Because of the low birth rate and of the rural exodus, the number of agricultural workers in France has been relatively small and has decreased still further since the World War. Moreover, although most of the peasant proprietors employ little outside labor, the wages of day workers and of domestic servants have shown marked increases in recent years. Quite recently, too, the accident compensation law was extended to agriculture. It is therefore not surprising that among agricultural laborers the trade union movement has been very weak.

Other types of agrarian organizations have, however, had an important development in France. Agrarian syndicalism, a movement in reality more cooperative than unionist, has grown rapidly since 1890. The *syndicats agricoles* are associations of producers (landholders and farmers of all kinds) one of the chief activities of which is the purchase of fertilizer, machines and tools. The wine producers, especially those in the south, have organized powerful cooperatives not only for the purchase of supplies but also for the sale of their products. More recent is the important movement for the organization of agricultural credit unions to help the peasants in financing the purchase of livestock and even of land. This movement has been supported by the government. A law of August 5, 1920, created a National Office of Agricultural Credit which advances funds to *syndicats*, cooperatives and regional banks

(*caisses régionales*). These institutions may be expected not only to help maintain but also to extend the system of small peasant holdings, which remains one of the most characteristic features of French economic and social life.

HENRI SÉE

See: MANORIAL SYSTEM; SERFDOM; JACQUERIE; FRENCH REVOLUTION; ABSENTEE OWNERSHIP; SMALL HOLDINGS; PEASANTRY; AGRARIAN SYNDICALISM.

Germany and Austria. Although serfdom lasted longer in Germany than in England and France, during the Middle Ages the evolution of the rural classes particularly in western and southern Germany was quite similar to that in France. At the end of the fifteenth and the beginning of the sixteenth century, however, the nobles, and even more the ecclesiastical lords, were making attempts to reenforce their rights, to extend their manorial administration and to encroach upon the communal property of their subjects. This activity was the cause of more and more frequent troubles in southern Germany, as well as in neighboring parts of Switzerland. Numerous understandings of a general character were formed among the peasants (as in the famous *Bundschuh*), and all the movements came to a head in the bloody Peasants' War of 1525. This uprising was in a certain measure reenforced by the Reformation movement, although it is evident from the famous Twelve Articles that the demands of the peasants were essentially of an economic and social character. Luther himself severely criticized the Peasants' War. After a terrible struggle the lords were victorious and the peasants fell back into their former condition of serfdom.

In eastern Germany—Germany beyond the Elbe—the condition of the peasants grew steadily worse after the beginning of the sixteenth century. They were reduced more and more to a position of virtual slavery. The characteristic feature of this evolution was the gradual transformation of the feudal tenure (*Grundherrschaft*) of the lords into estate ownership (*Gutsherrschaft*). The lords, attracted by the gradually increasing price paid for grain exported through the Baltic, undertook the direct exploitation of their estates. This they accomplished through the extinction of a great number of peasant tenures and through forcing the children of their tenants to serve on their lands (*Gesinde*), while prohibiting the emigration of the peasants. The latter were therefore reduced to a condition of subjection closely re-

sembling slavery. This subjection, to be sure, varied in severity in different sections of the country. In Prussia, where the kings were very powerful, the central government succeeded in restricting to a large extent the absolute authority of the lords. But in the eastern part of the Austrian monarchy—Silesia, Bohemia, Moravia—more severe conditions were to be found. The wars of the modern period, and especially the ravages of the Thirty Years' War, greatly aggravated the subjection of the peasants.

The abolition of the feudal regime occurred in western and southern Germany under the influence of the French Revolution. In the Rhine countries annexed to the French state until 1815, this abolition was rapid and radical; elsewhere it was more or less complete and rapid according to the degree of domination that France exercised. In the kingdoms of Württemberg and Bavaria and in Baden peasant emancipation was achieved only in the first half of the nineteenth century. In Austria, as early as the eighteenth century, Maria Theresa and especially Joseph II had, through a series of measures, succeeded in liberating the peasants from their most severe burdens. But after the death of Joseph in 1791 feudal rights were again enforced, and the peasants were not actually freed from the rule of the nobles until after the Revolution of 1848.

In Prussia the abolition of serfdom was the work of the royal government, particularly as directed by the ministers Stein and Hardenberg. Contrary to popular opinion, their reforms were not carried out under the influence of the French Revolution. By the edicts of 1807 and 1809 Stein abolished all servile dues (*Abzugsgeld*, *Gesindegeld*) and suppressed all legal distinctions between the different kinds of property. These arrangements were completed by the *Regulierungsgesetz* of the 14th of September, 1811, promulgated by Hardenberg. According to this legislation the tenant became owner of his holding, but on the condition that he abandon a third or a half of it. The result was an extension of the land owned by nobles, as well as an increase in the number of landless day laborers. Although from 1815 to 1820 there was a marked aristocratic reaction, during the period from 1821 to 1848 legislation favorable to emancipation developed in Silesia and in the province of Posen. A new stage of emancipation was inaugurated by the Revolution of 1848; the laws of the 2nd of March, 1850, abolished without compensation all the

manorial rights and services that still remained.

In eastern Germany, throughout the nineteenth century, an independent landowning peasantry scarcely existed. The land was owned almost entirely by the great nobles (Junkers) who cultivated their own estates through the employment of household servants and day laborers. The condition of the latter was deplorable throughout the whole of the first part of the nineteenth century; in the second half and until 1914 their position improved noticeably, thanks to increasing production, to the rural exodus and to emigration. The wages of household servants also increased, although their living conditions remained very bad. During this time the money wages of day laborers rose on the average 200 percent, real wages 120 percent. There was, however, no diminution in the exodus from the country to the cities, for wage increases were greater in industry. The landowners came to rely more and more upon the seasonal labor of foreigners, particularly Poles.

Unions had been organized among these agricultural laborers and the Social Democratic party had tried to arouse them, but both movements remained ineffective. It is to the Revolution of 1918 and to the German Republic that the German agricultural laborer owes his new and better condition. The republic early abolished all the political and civil restrictions from which he had suffered. As a result of its encouragement to union organization the *Reichslandarbeiterbund* had in 1920 a membership of 65,000; because of its activity the agricultural laborers secured for the first time in German history collective labor agreements, from which two millions of them profited. The state also forced the employers to provide more humane living conditions for farm servants. Its extension of arbitration to include agricultural labor was a reform of especial benefit to families tied to the large estates. For unattached workers the length of the working day was fixed by law—from eight to eleven hours according to the seasons—and through collective agreements wage rates were made uniform. As a result wages were considerably higher than before the war; their further rise was checked by inflation and by the falling off in agricultural output, both consequences of the war.

HENRI SÉE

See: MANORIAL SYSTEM; SERFDOM; REFORMATION; LAND SETTLEMENT; MIGRATORY LABOR; WAGE REGULATION; CREDIT COOPERATION.

Italy. The agrarian development of Italy, affected to some extent by the survivals of ancient Roman institutions and more definitely by peculiar geographic conditions and the general historical evolution of the country, was quite different from that of France or Germany. Moreover it did not occur uniformly throughout the country.

In the north the struggle of the prospering cities with the feudal nobles culminated, toward the end of the twelfth century, in the defeat of the nobles. They were made to spend a major part of the year within city walls, and their estates were put under the supervision of that branch of municipal administration which was concerned with the supply of food and raw materials. Under these conditions the servile status of the cultivators could not persist and by the fourteenth century no trace of it was left. At the same time the city bourgeoisie, enriched by commercial and banking activities, was buying up and consolidating nobles' estates. There emerged a system of large estates owned by the city patriciate, managed by employed superintendents along definitely commercial lines and worked by free laborers for wages paid in kind.

In Latium and the neighboring provinces the church acquired much land. Although it farmed this land directly at first, eventually the clerical farm managers, the *rectores* and *defensores*, came to be merely rent collectors from the dependent coloni. Large tenants of church land, the *conductores*, also began to function as collectors of rent, supervisors and even personal lords exacting a labor tribute from the coloni in the adjoining holdings. Although the church was careful not to extend the duration of tenancy beyond thirty years, which would automatically have made the tenancy hereditary, a class of hereditary semi-noble tenants soon appeared on church lands and finally gained almost complete independence of the church.

In the south and in Sicily large landholders used their power to form enormous latifundia at the expense of the state and of the peasant. Their further encroachments were the appropriation of the right of first purchaser of the peasant's produce and the gradual abolition of hereditary tenancies. An increasing area of land was laid under pasture; the position of the peasant, whose customary rights were ignored, became extremely bad. Between him and the landowner there was the large tenant, who

rented the entire estate and received with it the seignorial rights over the peasants. This system of feudalism corrupted by commercialism persisted until the eighteenth century, and in Sicily until the time of Joseph Bonaparte.

Unified Italy inherited a variety of agrarian regimes. The north was dominated by large estates worked by gangs of hired labor marshaled by a contractor. The wages, paid partly in kind, were very low; employment was of a seasonal character and the oppression by the gang captain extreme. Further south prevailed a great variety of metayage arrangements, with the landowner always getting a larger and better half of the crop. This was in fact a disguised form of wage labor, because the landowner directed through his manager a great many of the agricultural processes of his tenants. The poverty of the agriculturists was reflected in a diet based on maize, which caused frequent epidemics of pellagra. Still further south and in Sicily the latifundium remained the usual type of agricultural enterprise in the plains and valleys, while small peasant farms were prevalent in the mountainous districts. The latifundium was usually rented in its entirety to an entrepreneur, who exploited a part of it himself and subleased the rest, which in its turn would frequently pass through the same process of leasing and subleasing.

On the whole the situation was characterized by absentee ownership and the prevalence of large estates. The old agrarian systems were imposed upon a commercialized agriculture. The resulting dependence of the lower classes, with their slender income, upon market fluctuations of the prices of agricultural produce made their condition worse than it had ever been before.

The government of the new state was at first interested only in the complete abolition of feudal restrictions on the circulation of land. Even when the official investigation in the early eighties revealed the unusual squalor of life of the rural masses, little else was done than the passing of unenforceable laws providing for the reclamation of marshy lands, the breeding places of malaria. The agricultural laborer and tenant were therefore in a state of continuous unrest and willingly joined labor unions even when the latter were illegal (1885-1900). This inclination to combined action was strengthened by the fact that in many districts the entire rural population lived in large villages.

In 1891 the abolition of *usi civici* led to

clashes in the rural territory surrounding Rome. In the same year the *fasci* were organized in southern Italy; brought into life by radical agitation, these unions were a characteristic manifestation of peasant psychology with its faith that Christ and the king would support their demands for improved conditions. In 1893 a serious revolt led by peasant leagues broke out in Sicily. It was repeated on a smaller scale a decade later. After 1900 the agricultural labor unions were tolerated and in some cases encouraged by the government. The entire north was soon covered by a net of such unions federated provincially. Later an interprovincial *Federazione Nazionale dei Lavoratori della Terra* came into being. The most important achievement of these unions was the securing of collective contracts by which the unions supplanted the commercial gang leaders and with the aid of which they were able to obtain higher wages and a more equitable distribution of employment. Within a decade the small metayers found their interests antagonistic to those of labor and seceded from the labor unions to form autonomous leagues which were later often active in concert with the landowners. At the same time the landowners perfected provincial and interprovincial organizations of their own, so that by 1910 the successes of the agricultural labor unions were checked. Attention was then turned to collective leaseholds which were either collectively worked and managed enterprises or combinations of small tenancies for certain limited purposes. While the militant unions were led by socialists and syndicalists, the Catholics were fostering the development of agricultural cooperation, a movement which grew rapidly and whose several branches were brought together in the national *Federazione Italiana dei Consorzi Agrari*.

Troubles broke out again in the years following the World War, when the slogan "*La terra ai contadini*" (land for the peasants) was heard throughout Italy. The legislation of the war and post-war years, which provided for the temporary seizure of uncultivated or not properly cultivated lands and of lands which were not improved in accordance with preceding laws, could not stem the tide of forcible occupation of land by the peasants, which continued until the establishment of the Fascist regime.

On the whole little has been achieved either by mass pressure or by governmental measures. The most promising step of the government, an attempt to reclaim land and establish small

holdings, failed because of lack of funds in the treasury and dearth of private capital. The position of the Italian agriculturist is still greatly in need of improvement.

HENRI SÉE

See: LATIFUNDIA; FARM TENANCY; SMALL HOLDINGS; LAND SETTLEMENT; AGRARIAN SYNDICALISM.

Denmark. Agriculture in Denmark is more than a method of farming; it is a political system and a culture. In Denmark the state is rural rather than urban, agricultural rather than commercial. It is ruled by the farmers in their own interest and its educational, cultural and political agencies are dedicated to concern for their welfare and to the most advantageous distribution of their products.

About 1870 the competition of American wheat fields and the protective tariff policy of Germany had reduced Denmark to industrial straits. The people were sinking into despair, and the peasants seemed doomed to bankruptcy. But the very difficulty of the situation stimulated the peasants to efforts which within the next fifty years made Denmark a peasant democracy. Most observers have traced the origin of this change to the activities of Bishop Grundtvig, who gave his life to the development of an educational system that was democratic and suited to an agricultural population. The work of Grundtvig was associated with the development of the people's high schools, which as far as the farmers are concerned are the central feature of the educational system of the country. These schools are not vocational, but fuse culture with vocational education and aim to educate all the people. Not maintained by the state, they are completely self-governing and in a large measure self-supporting through their fees and some local aid. The principal of one of these high schools is almost always a man of distinction, who is responsible to no one but his community for the innovations he may introduce or the methods he may use. The schools are for adults between sixteen and forty years of age, and every peasant hopes to spend at least one term at one of them. These schools have contributed both to the development of cooperation and to the democratization of the Danish state.

The cooperative society is the second agency of agricultural organization in Denmark. Of the 200,000 farmers of Denmark, 184,000 are members of the more than 5000 different co-

operative societies in the country. These societies deal with almost every known necessity, but the dairy cooperatives are by far the most numerous. All the societies are aided by the state in a variety of ways. They have developed a high degree of business skill, and compact and loyal organizations. Almost every farmer is a member of several such societies. Through them he prepares for market his own butter and cheese, bacon and eggs, and exports them to London. In addition he is a member of a distributive society through which practically everything he consumes is purchased. Indeed the entire agricultural life of Denmark is centered around the cooperative society.

The Danish state is a farmers' state. The peasants have a large representation in the Parliament and control the ministry, of which many members are farmers. In recent years the very small peasants known as *husmaend*, owning possibly a half acre of land, have been rising to power in cooperation with the socialists. In this sense Denmark is a class state. The peasants have used their power to nationalize the railways, which are made to serve their export business. They have adjusted taxation to their interest and in recent years the movement for the single tax on land values has made substantial progress, more progress than in any other country in the world. The farmers have, however, been very generous in their social legislation and their provisions for social insurance, while trade unions are very strong and are encouraged by the state.

As a result of this class control, the few remaining feudal estates have been largely expropriated and divided into small holdings. The state has created credit funds to be loaned to prospective farmers who can convince local committees of their ability. For such persons the state provides ready made and fully equipped farms from the land taken from the large estates. In line with this policy tenancy has been very greatly reduced.

Denmark is a state that is consciously planned. It is an exhibit of agricultural efficiency. In no country in Europe are education and culture so widely diffused, in no country is landlordism so nearly extinguished, and in no state in Europe has economic democracy evolved with so much intelligence as in Denmark.

FREDERIC C. HOWE

See: FOLK SCHOOLS; DAIRY INDUSTRY; AGRICULTURAL COOPERATION.

V. EASTERN EUROPE. *East Central Europe and the Balkan Countries*. By the beginning of the eighteenth century serfdom was well established in most parts of southeastern Europe. In the Alpine lands the peasant still enjoyed a considerable measure of freedom, but elsewhere he was bound to the soil; and in countries like Bohemia, Moravia, Lower Austria, Galicia and parts of Hungary, where the lords cultivated on a large scale themselves (system of *Gutsherrschaft*), he owed important labor services (*Robot*) to his lord. In the Czech countries the old native aristocracy had been overthrown at the battle of the White Mountain (1620), and the serfs were subject to alien control.

It was not until the advent of Maria Theresa in 1740 that the centralized Hapsburg monarchy was strong enough to check the growing power of the feudal lords. As taxation fell almost exclusively on peasant land, encroachment by the lords meant a loss of revenue to the crown and was declared illegal in 1751. The treasury had also an obvious interest in checking the constant increase in the dues and services owed by the peasantry to their lords. Maria Theresa therefore regulated and codified the existing obligations in the kingdom of Hungary by the *Urbarium* of 1767, and applied the same general principle to Bohemia and Moravia eight years later. On the crown domains she went still further, abolishing the servile status and introducing money rentals in place of dues and services. Her son Joseph II attempted to extend this policy to all domains. In 1781 he abolished the servile status in the Bohemian lands in a document known as *Leibeigenschaftsaufhebungspatent* and issued a series of decrees between 1785 and 1789 reducing the obligations of the peasantry to their lords and transforming them into money payments. Unfortunately these last measures broke down in practise and were withdrawn by the disillusioned monarch a month before his death in 1790. Reform from above had failed, and reaction was to persist for over half a century.

But the example of the French Revolution and the slow growth of a new national feeling were not without effect. Count Szechenyi succeeded in obtaining freedom of migration for the Hungarian peasant in 1836, while a fierce peasant revolt in Galicia ten years later forced the agrarian problem upon the attention of an apathetic central government in Vienna. By 1848 the Danubian peasant had become class conscious, and a number of bad harvests in-

furiated him still more against the feudal privileges enjoyed by his lord. The revolution shook the old political regime, and on July 26, 1848, the new Constituent Reichstag at Vienna, in which nearly a quarter of the deputies were peasants, declared that "from now on, servile status, with all rights and duties springing therefrom, is abolished." A patent issued on September 7th gave effect to this resolution. The distinction between noble and peasant land disappeared, the peasantry acquiring the latter in full individual ownership. All obligations arising from personal subjection were abolished without compensation, while the money value of the dues and services was to be assessed by a government commission and was in fact ultimately paid off with government assistance. These principles were applied to Hungary, with some modifications, after the suppression of the great national rebellion of 1849.

In the basin of the lower Danube national and agrarian emancipation went hand in hand. A Serbian law of 1839 gave the peasants full proprietary rights over the land actually held by them six years previously, and the former Turkish lords lost their influence. In the Rumanian principalities the revolt led by Tudor Vladimirescu in 1821 was an outward sign of agrarian discontent, but when the Russians occupied the country and issued a constitution (the *Règlement organique* of 1831) they merely codified existing agrarian relationships. It was left to Prince Cuza, the first ruler of the united country, to strike at the root of feudal privilege. In 1863 he secularized the church lands, but his proposal to emancipate the serfs and abolish labor services (*claca*) met with such intense opposition from the aristocracy that he disregarded the constitution and issued the comprehensive Rural Law on his own initiative in 1864. The former serfs obtained, in full ownership, a quota of land varying according to the number of oxen they possessed, while compensation to the lords in respect of labor services and tithe, which were now abolished, was paid for the most part by the state.

In Bosnia and Macedonia agrarian feudalism still survived under Turkish (and Austrian) rule, but elsewhere in the Danubian region the peasantry had by the sixties been emancipated from serfdom. Under the individualistic legislation of the period, the clan settlement (*zadruga*), which prevailed among the upland pastoralists in the southern Slav lands, rapidly disappeared. Here, as elsewhere, the peasants

lost the protection of custom before they were able to use contractual freedom. They were, indeed, singularly ill-prepared to face the rapid economic changes of the new era. With the advent of railways, a money economy and international trade, the days of the self-sufficing village community were numbered, and the rapid increase in population soon created a veritable land hunger.

The legislation of 1848 and 1864 had left what was once "noble" land in the hands of its former owners, and very large estates still played an important role in the rural economy of the Danubian lands. In Bohemia properties of over 125 acres comprised 41 percent of the total area, and some of these were of truly princely dimensions. The same was true of Hungary, where estates of over 140 acres occupied nearly 56 percent of the total area, while in the Old Kingdom of Rumania 48.5 percent of the arable land was in the hands of owners of 250 acres or over. The agrarian structure of these countries was thus dangerously top-heavy. Many of the landlords were absentees, and their land was often leased out on a produce-sharing tenancy (*metayage*). In parts of southern and eastern Hungary labor services were established on a contractual basis, and bad harvests led to considerable unrest in the nineties. Throughout the Dual Monarchy the regions of latifundia were those which sent their dissatisfied but enterprising peasant sons to seek a new home across the ocean. In Rumania the exactions of lessee trusts led to the last of a series of peasant revolts in 1907, and the agrarian question dominated the political stage in 1914. In many areas, such as Bohemia, Slovakia, Transylvania and parts of southern Hungary, the landed aristocracy was alien in race and sympathies to the majority of the population, and the land problem was national as well as social.

Then came the World War, with its profound effects on the psychology of the masses as well as on their material well being; the break-up of Russia, with its example of a new agrarian practise; and finally the collapse of the Central Powers and the formation of new national states. The old agrarian order was doomed.

While the German armies were overrunning the country, a Rumanian Constituent Assembly, composed mainly of landlords, voted the principle of the expropriation of the large estates in June, 1917, and, on the battlefield of

Mărășești a few weeks later, King Ferdinand gave a solemn promise that the crown domains should be divided among the peasants. On December 15, 1918, the government issued a decree which filled in the details of agrarian reform. Land belonging to absentees and corporations was expropriated in its entirety, while other owners were called upon to surrender some five million acres of arable land according to a sliding scale which left owners of 250 acres or less untouched, but allowed no proprietor to keep more than 1250 acres. The provisional government of Bessarabia had already passed a revolutionary law expropriating all land over and above an allowed minimum of 250 acres, and the national assemblies of Transylvania and Bukovina made agrarian reform a condition of their union with the Old Kingdom. Finally acts passed in July, 1921, codified the earlier decrees and established a new scale of expropriation which was more severe but also more scientific. Compensation, which was given in government bonds from 1918 onwards, has become negligible as a result of the depreciation in the national currency.

In Czechoslovakia agrarian reform was almost equally drastic, but it has been applied more slowly. A law of April 16, 1919, placed all estates of over 375 acres of arable, or 625 acres of all land, under sequestration; they could not be disposed of without the consent of a specially constituted government land office. The law of May 27, 1919, gave small holders proprietary rights over such land as they had rented from the large estates since 1901; moreover, from 1920 onwards, sequestered land has been divided up among landless peasants and others. The expropriated "home farms" (*Restgüter*), however, have been maintained intact. The division of the arable land will be completed by the end of 1929, when the former landlords will have lost a total of over 3,000,000 acres of arable land and nearly 7,000,000 acres of other land. Compensation is paid on the basis of land prices in the period 1913-15, and no allowance is made for currency depreciation since that time.

Agrarian reform in Yugoslavia has been somewhat chaotic. A decree of February 25, 1919, contained certain "preliminary instructions" providing *inter alia* for the abolition of the servile status, which still survived in Bosnia and Macedonia; the suppression of the colonate, a semi-servile form of metayage tenure common in Dalmatia; the expropriation of the large estates, especially in Croatia and what was once

southern Hungary; and the nationalization of the forests. This was supplemented later by a number of confused and often contradictory decrees, and approximately 3,000,000 acres of land (less than half of which is arable) have been taken from the large estates. Schemes of internal colonization have not usually proved successful, and the reform has been carried out on political rather than scientific lines.

In Austria large estates accounted for only 6 percent of the total arable land, and agrarian reform was virtually limited to the Resettlement Law of May, 1919, which restored to the small cultivator former peasant land acquired for sporting purposes since 1870. The case of Hungary, however, is in marked contrast to that of its neighbors. The revolutionary agrarian legislation passed by Bela Kun in 1919 did not survive the Bolshevist regime. A law passed by his successors in December, 1920, did little more than give the government a first refusal of all rural property offered for sale, while recognizing the rights of certain categories of persons (especially the so-called "heroes") to allotments. Some of the land acquired under the capital levy scheme has also been used for settlement, but properties of 140 acres and over still compose nearly half of the total area of the country. Hungary is an island of latifundia in a green sea of agrarian reform.

Elsewhere the day of the feudal hierarchy is virtually over. The peasant is slowly becoming an important factor in politics and his standard of living has undoubtedly risen. But the change in land ownership has not been accompanied by a corresponding change in the average unit of production. Approximately one half of the large estates in Old Rumania, for example, were formerly leased out to small cultivators, and it is estimated that not more than 7 percent of the total arable land in Czechoslovakia has passed from large to small scale production in consequence of the reform. Moreover peasant holdings of inadequate size have been augmented. The growth of rural education and agricultural cooperation should, however, lead to increased efficiency in the future. The social results of this recent legislation are most far reaching; agrarian reform has opened out new possibilities in the lives of the masses of the people.

IFOR L. EVANS

See: SERFDOM; LATIFUNDIA; FARM TENANCY; SMALL HOLDINGS; PEASANTRY; NATIONALISM; PARTIES, POLITICAL.

European Russia. As early as the fourteenth century the position of free agricultural tenants in Russia was somewhat similar to that of personal serfs. In 1597 Boris Godunov completed the series of enactments and legalized the customary rules which bound the cultivator to the soil. During the next two centuries serfdom spread over an increasing territory, and the position of the serf became almost indistinguishable from that of a slave; by the end of the eighteenth century he could even be sold apart from the land to which he was presumably attached.

Serfdom had many economic and political functions. It was first of all a primary source of agricultural labor, and in the primitive condition of Russian agriculture labor was the most important factor in production. The value of a piece of landed property was determined largely by the number of serfs bound to it. From the point of view of the government also, serfdom was essential, for its assurance of continuity of forced labor (*barshchina*) or of money dues (*obrok*) furnished in the early years a stable economic basis for the military and administrative officialdom. Later serfdom performed the same function in assuring the prosperity of the gentry, who were themselves obliged to serve the state. The repeal of this obligation in 1762 removed one of the most widely accepted justifications of serfdom and led to discussion of its abolition. Pugachev attempted to make use of this sentiment in the revolt which he led a decade later. Serfdom also facilitated the control of the government over an immense and undeveloped territory. The landowner was made responsible for the preservation of peace and order, the collection of taxes, the provision of assistance when crops failed, and recruiting for the army. This devolution of powers is suggestive of the early stages of most colonial governments. The landowners, however, were not in all cases the base of the administrative hierarchy concerned with the rural population. The serfs attached to larger estates, especially to the *obrok* estates of the absentees, developed their own corporate organization, tolerated because it was an agency through which the joint responsibility of all the serfs for various dues and taxes could be enforced. This organization, the very existence of which stimulated class consciousness and self-government, influenced the later development under legal sanction of the land commune (*obshchina* or *mir*) with its pronounced tendencies toward equalization of land distribution.

The abolition of serfdom was accomplished in Russia by a decree of Alexander II in 1861. A number of factors had combined to bring about this change in policy. The spread of western ideas in governmental, social and literary circles; the frequency of local uprisings; a growing realization of the economic advantages of free labor; the necessity of maintaining Russia's prestige which had been shaken by the Crimean War, were all of importance. The act abolishing serfdom has been characterized as "the greatest legislative act in history," but it might also be said to have created the greatest economic maladjustments.

This act, supplemented and amended by later enactments, proclaimed the legal freedom of the former serfs and made provisions for a land settlement. The emancipated serfs were to receive individual grants of cottage and kitchen-garden land and communal grants of arable, pasture and meadow land. The state paid the former landowners in bonds and the peasants were required to repay in instalments. Alienation of allotment land (*nadel*) to non-peasants was restricted by a law of 1893. The small size of most holdings made it impossible for the peasants to make their payments, and the mortgage debt, principal and overdue interest, was canceled by law in 1906. Even with this relief, however, the situation remained unsatisfactory.

In Russia proper the power to regulate the use of the newly acquired communal land was granted to the land commune (*obshchina*), a body composed of the heads of the households of a given manorial area, which adopted decisions by a two-thirds vote. General redistribution of the communal land among its members was allowed at intervals of not less than twelve years by the terms of a law of 1894. The component of this land commune was, and as a working unit still remains, the family, headed by an elder, whose powers were considerable, and carrying joint responsibility for the obligations and arrears of all its members. The right of an adult married member of such a family to claim the carving out of a separate holding was granted only in 1886, and then only on condition that reasonable cause of family dissent be shown, and also that authorization of the *mir* be secured.

The liberated serfs (about 22,000,000) together with the state and crown peasants (about 9,000,000) formed a peasant class with a special legal status. To give effect to this position

they were organized in local corporations (*selskoe obshchestvo*) with elected executives, and possessed of certain administrative and judicial powers. It was through these corporations that the government enforced the joint responsibility of the peasants for arrears in taxes and the performance of statute labor, such as road repairs, and military service. From 1861 until 1913 this class was subject to the jurisdiction of its own elected judges or courts (*volostnoy sud*), which based their decisions largely on customary law. This legal status involved certain disabilities. Only the peasants, for instance, were subject to the sentence of corporal punishment. According to the Zemstvo Statute of 1864 the peasants constituted a separate group in elections to rural local government bodies (*zemstvo*); and later the same provision was made concerning elections to the national legislature (Duma). With the revolution of 1905 some of these disabilities lapsed and the status of the freed serf approximated more nearly that of a full citizen.

After 1861 there had been an unmistakable economic decline in the densely populated agricultural districts of central Russia. Elaborate official and *zemstvo* statistics showed in detail that the majority of the peasants had inadequate holdings, were underfed, underemployed, in arrears with taxes and were paying exorbitant rents for extra-allotment land. While in 1861 only 28 percent had inadequate holdings, in 1914 the proportion was probably about 70 percent.

Four notable and interrelated remedies for this situation were widely debated: more land for the peasants, industrialization of the country, improved methods of cultivation, and birth control. The last was completely out of the question, and the first was the most popular both among peasants with inadequate holdings and among liberal and revolutionary groups. The pressure in this direction monopolized the nation's attention. The purchase by peasants of 100,000,000 acres in the period 1862-1914, chiefly through the Peasants' Bank, and the settlement of millions of peasants in Asiatic Russia accomplished but little compared with the magnitude of the problem. And though by 1914 the peasantry owned four fifths of the arable land in European Russia, their land hunger was far from satiated.

Probably the only practicable solution of these difficulties was to be sought in improved cultivation by the individual, free from communal

control and master of a compact holding. Stolypin aimed at such a change in the ukase of November, 1906, which, with further modifications intended to encourage individual cultivation, was made law by the Duma in 1910. Two types of peasants responded to the new opportunity: those who wanted a full sized manageable holding, and those who wanted to get rid of communal and family restrictions in order to sell their uneconomic holdings and find outside employment. Between 1907 and 1913 no less than one fifth of the farms under communal tenure (or 2,478,000 peasants with holdings of 45,900,000 acres) claimed separation from the commune; 24 percent of the claims were satisfied without the consent of the communes. In addition 3,500,000 in communes where redistribution of land had been in abeyance for twenty-four years became individual owners. The opportunity for individual ownership was welcomed by the many peasants who had been restive under family control and power vested in heads of households. As a result of these changes the village commune and patriarchal family arrangements were being replaced gradually by a system of economic individualism.

Then in the revolution of 1917-18 all non-peasant land and all peasant lands held in private ownership were seized by the land communes on behalf of the majority with inadequate holdings. This was not organized nationalization, but a chaotic performance carried out in piecemeal fashion by several hundred thousands of communes. It indicates clearly the importance of the agrarian aspect of the whole revolution. The resulting average accretion of land per peasant holding was 22.5 percent, or from 5 to 6 acres per head of the farming population, but the increase was smaller in the densely populated regions and everywhere most holdings remain very much below the limit indispensable for bare subsistence under the present mode of cultivation. On January 5, 1918, the Constituent Assembly passed the Fundamental Land Act prepared by the Social-Revolutionary party. It proclaimed that "the right of private property over land within the borders of the Republic is henceforward abolished once and forever." The main features of this act were incorporated in the Soviet Land Code of 1922. The emphasis at first laid on the right of the land commune to distribute the land according to the labor power of those who worked it was, however, lightened under the New Economic Policy. Articles 134-137 of

the code revert to the Stolypin reforms by facilitating separation of the individual cultivator from the land commune. There is this important difference, however, that the family reappears as a collective labor unit and that peasant land cannot be held as unrestricted private property.

A. MEYENDORFF

See: SERFDOM; MIR; PEASANTRY; RUSSIAN REVOLUTION; NEW ECONOMIC POLICY.

Poland and Lithuania. Probably because of the slowness with which the subjection of the peasants occurred, there were almost no peasant uprisings in Poland in the early years of its history. By the seventeenth and eighteenth centuries, when serfdom was breaking down in western Europe, in Poland it was at the height of its development, with land and power concentrated in the hands of the nobility, and king and towns extremely weak. It was in this period that agrarian movements became important.

Although from time to time individual landowners advocated reforms, the majority of the gentry were opposed to change. Their reluctance to take any decisive action, even during the partitions of Poland, gave the foreign conquerors the opportunity to play the part of liberators. The peasants so definitely regarded the invaders as their benefactors that subsequent nationalist movements were condemned to failure. For instance, during the nationalist uprising in Galicia in 1846 the peasants themselves organized a massacre of the Polish landlords and thus crushed the rebellion.

Unrest and demands for land and personal freedom on the part of the peasants increased between 1846 and 1864. The emancipation of the serfs in Prussia (1848) and in Galicia (1849) caused the peasants in the Russian section to clamor more insistently for reforms. Seeing the necessity for some action, the Polish leaders and the Russian government tried to anticipate each other in satisfying these demands. The leaders of the Polish nationalist insurrection of 1863 issued a manifesto proclaiming the emancipation of the serfs. The Russian government countered in 1864 with a similar decree, which effectively quelled the uprising.

But none of these acts of emancipation solved the economic problems of the peasants. Many were left without land, and even those with holdings lacked adequate capital or credit facilities. In Prussian Poland there set in a

strong wave of emigration to the United States and Germany. In Russian Poland the surplus rural population found employment in the newly organized industries. But in Galicia, where there was little emigration, and industrial employment was scarce, the onerous position of the peasants resulted in a populist peasant movement which later developed into the strongest of the Polish peasant parties. This particular movement also began to take on the tinge of nationalism. Although several proposals for general land reforms were made before the World War, nothing of importance was accomplished until the creation of the independent Polish state. Indeed just before the post-war reforms, 31 percent of the agricultural population consisted of landless peasants, while less than 1 percent owned 31 percent of the total land.

The Polish Land Reform Bill, enacted in 1920, was passed under pressure of the necessity for national unity in the face of the threatened Russian invasion. It provided for the creation of a land reserve, consisting of crown land, of confiscated estates of former officials, of certain church properties and of land from private estates in excess of 180 hectares. Compensation for the property seized was fixed at 50 percent of its market value. The land from this reserve was to be parceled out to landless peasants in lots of 15 hectares and in varying proportions to peasants whose holdings were less than 23 hectares in extent. Numerous difficulties have been encountered in the carrying out of these reforms. Perhaps the greatest obstacle to the realization of the desired changes has been the lack of funds in the state treasury.

As long as Lithuania was a part of Poland, the two countries had similar agrarian difficulties. Antagonism between nobles and serfs was heightened in Lithuania, however, by the Polonization of the nobility in the face of continued loyalty of the peasants to Lithuanian customs and language. Russian annexation resulted in still worse conditions for the peasants, and it was not until 1861 that the government decreed the emancipation of the serfs and enforced some distribution of land. Following an insurrection of 1863 the Russian government inaugurated an attempt at compulsory Russification, involving the suppression of the Lithuanian language and the Catholic religion. The opposition aroused by this policy led to frequent confiscation of land by the government.

A national populist movement sponsored in this period by Lithuanian intelligentsia became later the backbone of the struggle for Lithuanian independence.

The gravity of the economic condition of the peasants was striking; just before the war 17 percent of them were landless and 28 percent owned no more than 3 hectares of land. Although here, as in Poland, attempts were made to secure agrarian reforms before the war, it was only after 1918, when Lithuania became independent, that anything was accomplished. The Agrarian Reform Law, passed by the Constituent Assembly of Lithuania in 1922, provided for the expropriation of owners of large estates, with some compensation, and the distribution of the land to landless peasants and to those with very small holdings. As a result of this legislation many new farms have been created, and the situation of the peasantry has materially improved.

ESTHER R. MANGEL

See: SERFDOM; PEASANTRY; NATIONALISM; SMALL HOLDINGS.

Latvia and Esthonia. Agrarian movements in Latvia and Esthonia have been to some extent also nationalist movements. The original free inhabitants of the country had been converted into serfs in the thirteenth century, when the German Knights of the Teutonic Order seized the land on the pretext of converting its peoples to Christianity. The opposition of the peasants to these German lords persisted for many centuries; among the more important of the continual uprisings to which it led were those of 1343, 1560, 1784, 1805, and those during the forties and fifties of the nineteenth century.

Throughout these years the position of the peasantry depended also on the attitude of the frequently changing governments, for Poland, Sweden and Russia in turn controlled the two countries. In 1681 Sweden attempted to abolish serfdom and reform conditions of tenure; but when Russia acquired the countries in 1721 the Swedish laws were abolished, and the landlords went so far in their oppression of the peasants that the Russian government intervened with a measure of protection. Governmental interest was further stimulated by the French Revolution, and there resulted in Latvia in 1804 a reform which gave the peasants hereditary leasehold of the land.

This situation, however, was changed by the

reforms of 1816 in Esthonia and of 1819 in Latvia, which emancipated the serfs without providing grants of land, and thus left the peasantry virtually destitute. Widespread emigration and recurring revolts followed. After 1841 a series of regulations delimiting the area of peasants' land and regulating the rights of leaseholders was passed. While these regulations introduced some improvements in the conditions of the peasants, they did not materially lessen agrarian unrest, for most of the land which the peasant tilled still remained the property of the lord.

Since the national and the agrarian movements in Latvia and Esthonia were both directed against the German aristocracy, it was natural that there should have been an early identification of the two and that national independence brought with it agrarian reform. The radical character of the post-war reform laws in these countries was due to the fact that the landowners constituted a group nationally and culturally alien to the majority of the population of the two newly created states, as well as to the influence of the Russian Revolution and the Soviet invasion. These reform laws expropriated the owners of large estates and parceled out their land among the peasants. In Esthonia former owners were compensated, but in Latvia they received no compensation. The number of small farms in both countries has increased tremendously as a result of this legislation. Whereas in Latvia before the reform the peasants had owned only 39 percent of the total land, by 1923 holdings of from 2 to 50 hectares in extent comprised 81 percent of the land, and in Esthonia the percentage of the total land in small holdings increased from 42 percent in 1919 to 87 percent in 1924. As far as one can judge, the reforms have resulted in notable improvements in the conditions of the peasantry in both countries.

ESTHER R. MANGEL

See: SERFDOM; PEASANTRY; NATIONALISM; RELIGIOUS ORDERS; SMALL HOLDINGS.

VI. UNITED STATES. During the colonial period of American history agricultural interests dominated the legislatures of the southern colonies almost exclusively. Such agrarianism as there was in that section was directed against the imperial policy of Great Britain, which was formulated in the interest of the British commercial classes. An important contributing

factor in producing revolutionary zeal among southern colonial planters was their feeling that they were victimized by the merchants in Great Britain from whom they purchased their supplies and to whom they sold their crops. Hence it may be said that so far as the South was concerned the American Revolution itself was an agrarian movement. In the North the colonial governments were usually dominated by the mercantile interests of the seaboard towns. In contrast to the South, where agriculture was carried on "as a business," in the North the farmer usually farmed "for a living." He was frequently a debtor to the city merchant or shopkeeper. During and immediately after the revolution his debts tended to increase, this condition becoming particularly intense in Massachusetts and Rhode Island. In both these states the farmers attempted to obtain control of the state governments, pass stay laws against the execution of mortgage foreclosures and provide for the emission of large quantities of paper money with which they might liquidate their indebtedness. They obtained control of the government in Rhode Island, issued paper money in abundance and almost literally thrust it down the throats of their protesting creditors. In Massachusetts, however, the efforts of the farmers met with no such success. In the western part of the state many of them united under the leadership of Daniel Shays, marched boldly into the courts and prevented the transaction of legal business. But troops were called out and Shays' mob was dispersed.

In the period 1783-87 while these disturbances were taking place in Massachusetts and Rhode Island, vested interests in the United States were neither very numerous nor united. Nevertheless they were class conscious and alert against dangers that threatened to curtail their development or seemed likely to jeopardize the position they had already attained. To aid these interests the federal constitution was brought into existence in 1787-89. During the ensuing twelve years while the Federalist party retained control of the central government, the financial, foreign and taxation policies of the United States were designed to assist the commercial, manufacturing, banking and speculative groups. The theory upon which Hamilton and other Federalists based their arguments in favor of such policies was that by advancing the interests of these groups directly, other groups, particularly the agricultural, would benefit indirectly. While at no time since Ham-

ilton's day have those in control of the federal government stated their theories so boldly and frankly, it may well be maintained that in practise, with some minor exceptions, the policy of the government has never changed. At the same time other classes than these which may be designated as "business interests" have more or less unconsciously acquiesced in this theory.

From time to time the farmers, particularly the producers of such great staple agricultural crops as rice, cotton, tobacco, grain and meat, have protested. They have argued that their industry is basic and that consequently their prosperity should be the primary and direct concern of the government. The first American statesman of importance to hold this view was Thomas Jefferson. He succeeded in building up a great political organization composed in the main of western frontier farmers and a majority of the southern planters. The bond of union among his followers was opposition to the privileges that had been bestowed upon the business groups by the Federalists. They had no constructive program of their own comparable to that which the Federalists had put into execution. Hence aside from strict economy in the administration of the government and the purchase of Louisiana, which may be considered an agrarian policy, Jefferson's administration was of a negative character. His effort to curb the power of the Supreme Court failed and very little of the Federalist program was undone.

Under Jefferson's successors, Madison, Monroe and John Quincy Adams, the Republican party became almost as much a party of the business groups as the old Federalist had been. The frontier farmers and the southern planters became restive and with the assistance of certain labor groups in the eastern cities elected their candidate, Andrew Jackson, to the presidency in 1828 against John Quincy Adams. Again the results were on the whole negative. The destruction of the Second Bank of the United States, the lowering of the protective tariff, the removal of more Indians west of the Mississippi, and the appointment to the chief justiceship of a man less amenable to the dictates of the business interests than John Marshall had been, were the principal accomplishments of the Jacksonian epoch from an agrarian standpoint.

From Jackson's time to the Civil War, agriculture in the United States was relatively prosperous, but those engaged in it tended to

divide into three fairly well marked groups: the southern planters, the western grain growers and the eastern truck farmers. The last of these generally identified their interests more or less completely with those of the business people of the cities to whom they sold their produce, and in politics they usually followed the lead of the business men. Although mutually suspicious, the other two agricultural groups tended to act together in politics and exerted sufficient influence in Washington from 1830 to 1860 to hold the balance between agriculture and other forms of business enterprise more nearly even than has been the case since the Civil War. Between 1850 and 1860 the two groups diverged rapidly over the questions of a free land policy, slavery extension, government aid to transportation facilities and a persistent imponderable—the morality of slavery. The new Republican party which came into power in 1860 was an alliance between the eastern business interests with their satellites—the eastern truck farmers—and the western grain growers. The southern planters, rendered desperate by their loss of influence in the national government resulting from this alliance, and unwilling to submit tamely to impotent isolation, carried their states into secession and undertook the task of establishing a separate confederacy of their own. In the Civil War that followed, the southern planters lost all—their Confederate government, control of their state governments, most of their landed property, all their slave property and finally their own peculiar form of agricultural organization.

With the collapse of the most articulate agricultural group that has ever existed in the United States, business interests entered upon a period of almost unchallenged control of the federal government and most of the state governments. Far from being hindered by government regulation, they received at the hands of the central and local governments every favor they desired. The Hamiltonian theory was practised with almost no qualifications. What could not be gained by fair means was frequently obtained unfairly. Despite some talk about "the corrupt alliance between big business and politics," the people of little or no means accepted the situation cheerfully, for in the main, so far as they thought about the matter at all, they believed it best to let business men, whose wisdom had been manifested by their success, control the governments in

their own interests, and hoped that some of the wonderful prosperity might eventually overflow to their own benefit.

Such dissent as there was came mainly from western grain and meat producers. During the Civil War these farmers had been prosperous, but with the cessation of hostilities came a rapid decline in their affluence. Foremost among the factors contributing to this result was deflation of the currency. This, coupled with an increase in the supply of agricultural commodities, due in part to the opening up of new grain lands under the generous provisions of the Homestead Act of 1862, brought a period of low prices, which with few interruptions lasted until the close of the century. There was no decline in interest rates, and the principal of such debts as the farmers had contracted had to be repaid in a dollar of enhanced value. Furthermore the prices of commodities which the farmers had to buy did not decline in a ratio commensurate to those they sold. Consequently many farmers demanded that the government cease its policy of contraction and enter upon one of inflation of the currency until prices were again somewhere near their war-time level. Failing in their efforts to secure endorsement of their demand from the old parties, some of the farmers organized the Greenback party and put candidates in the field for the presidency and for Congress during the years 1876-84. This attempt having failed, they turned their attention to the question of "free silver" (*q.v.*). Silver had been demonetized in 1873, but soon afterwards there was a rapid increase in the amount mined. The agrarians believed that if it could be remonetized at the old ratio of 16 to 1 with gold there would follow an inflation of sufficient proportions to give them relief. In 1878 they succeeded in having Congress enact a silver-purchase law. This gave some relief, but after a time the farmers again grew dissatisfied and demanded more silver. In 1890 this was granted in a new silver-purchase act. Then followed the panic of 1893, and still harder times for the farmers. President Cleveland, solicitous about the safety of the gold reserve, induced Congress to repeal the silver-purchase act. Even before this the farmers of the West, aided by some from the South, had organized the Populist party and demanded, among other things such as government ownership of railroads, telegraph and telephone lines, the free and unlimited coinage of silver at the 16 to 1 ratio.

Aggrieved at the action of Congress and President Cleveland, the silverites attacked with new vigor and in 1896 gained control of the Democratic party and nominated William Jennings Bryan for the presidency with the free coinage of silver as the paramount issue. This campaign marked the high tide of agrarian challenge to business men's control of the government.

After the defeat of Bryan agrarian discontent abated somewhat because of a period of relative prosperity for western and southern agriculturalists. But it was merely an abatement. Bryan returned to the attack in 1900 only to meet a more decisive defeat than in 1896. During the Roosevelt, Taft and Wilson administrations, 1901-21, there was no agrarian party in national politics, but there were a number of congressmen in both parties, mainly western Republicans, who were ever on the alert for the interests of their constituents. This group came to be designated as the "Agricultural Bloc," and exercised considerable influence, especially during the administrations of Roosevelt and Wilson. As far back as the seventies and eighties, a good deal of agrarian complaint had been made against the unfair practices of railroads and manufacturing corporations that held a more or less monopolistic position and were loosely designated as "trusts." The so-called "Granger movement" and certain local "anti-monopoly" parties had endeavored to bring railroads and trusts under state regulation and had succeeded to some extent. But since trusts and railroads were interstate in character, any regulation to be effective had to be national in scope. In 1890 Congress had made a feeble effort to prohibit trusts, and in 1887 had attempted to regulate railroads, but almost nothing of importance had been accomplished. In the first decade and a half of the twentieth century the agrarians renewed their efforts and obtained the support of the presidents. Many regulatory laws were passed and a number of suits against the trusts were successfully prosecuted. During President Wilson's administration Federal Land Banks were established which made it possible for farmers to obtain long term loans at lower interest rates than had ever been the case before.

During the World War high prices for agricultural products gave rise to excessive inflation of agricultural land values, particularly in the grain and meat producing regions of the West. When the prices of agricultural products

began to return to their pre-war level, those who had purchased at high prices and even those owners who had retained their land throughout the war suffered greatly, for prices of other products did not decrease as rapidly. Consequently agitation began for some sort of agricultural relief for the growers of staples, the outcome of which was the introduction in Congress of the McNary-Haugen Bill. The ostensible purposes of the bill were to promote orderly marketing, provide for disposition of surpluses, stabilize prices, minimize speculation and encourage cooperative marketing by producers. The bill passed Congress in 1927 and in modified form again in 1928, but it was vetoed by President Coolidge in both forms. His position was that it discriminated in favor of certain agricultural products against others, that it was in essence a price fixing measure and consequently contrary to sound economic practise. No provision was made directly for stabilization of prices under the Agricultural Marketing Act of 1929. But the Federal Farm Board was authorized to extend credits to cooperative associations whose most important function is the regularization of the flow of products to market and the control of price fluctuations.

BENJAMIN B. KENDRICK

See: PARTIES, POLITICAL; PUBLIC DOMAIN; HOMESTEAD; GENERAL PROPERTY TAX; GRANGE; NON-PARTISAN LEAGUE; FARM BUREAU FEDERATION, AMERICAN; FARMERS UNION; FARMERS ALLIANCE; FARM BLOC; FARM LOAN SYSTEM, FEDERAL; FARM TENANCY; NEGRO PROBLEM; LAND SETTLEMENT; VALORIZATION.

VII. LATIN AMERICA. Well developed systems of land tenure existed in America long before the advent of Europeans. Although many of the Indians were primarily hunters or fishermen, having little interest in permanent land rights, such agricultural people as the Nahuas of the Mexican plateau, the Mayas of Yucatan and the inhabitants of the Inca Empire had recognized the need for orderly methods of holding the land and had devised complete agrarian systems. The basic form of tenure was communal; the land belonged to a group (either the members of a kinship unit or the duly recognized residents of a community), was inalienable and was distributed periodically among those entitled to its use. In some regions the distribution was annual, in others only occasional, as parcels of land became available for allotment or as newly constituted

households required additional plots. In Mexico the group holding the land was the *calpulli*; in the Inca Empire it was the *ayllu*; both of these terms apparently originally signifying kinship units (clans), but both seeming to have become place units (village communities) as the groups became sedentary. Mexican society had advanced partially out of the communal stage and certain lands had become virtually private property before European invasion.

The Spanish conquest tended to preserve rather than to destroy these aboriginal agrarian systems. Society in Spain was still organized somewhat on the feudal basis, and the newly acquired territories were distributed among the conquistadors in large grants which in time became permanent and upon which the natives became peasants or serfs. The *encomiendas* or *repartimientos*, as these grants were called, generally allowed the Indians to retain their own method of holding their parcels of land within the great property. Thus a system of latifundia was imposed upon the system already existing without greatly disturbing the original order, and there developed a dual tenure of land by which the Indian village retained its rights to the communal holdings and the grantee became the overlord of the entire estate. In those parts of Latin America where aboriginal agriculturists existed these two systems survive to the present time almost unchanged.

Many attempts have been made to reform this semi-feudal system. Since most of the estates were held by European-born Spaniards during the colonial period, it was the landless creoles and mestizos and the Indian serfs who most stoutly demanded modification. Some historians consider that it was more against this system of land tenure, with its concomitant social, economic and political inequality, than against the rule by the mother country that the colonies of Spain revolted. Certainly the great unrest which made the revolutions possible was due in large part to the agrarian situation. Little, however, was accomplished toward land reform by the wars for independence, for the new rulers of the country (the creoles and the mestizos) merely replaced the Spaniards as the landholding class. Since independence, frequent efforts have been made to correct the evils of the inherited land system. Such attempts have been usually directed against the monopolization of land with its accompanying evil of peonage, against the communal character of the Indian holdings and

against the great accumulation of landed property by the church. Within a few years after the revolutionary wars, most of the Spanish American republics abolished the ancient institution of *mayorazgos* (entailed estates), following the lead of the government established in Spain by the constitution of 1812. This move permitted the breaking up of vast properties which had been held intact for generations, although family pride in the ancestral estates prevented the accomplishment of all that was desired. In some of the countries, particularly in Argentina, changed economic conditions have hastened the division of many large properties. One of the principal aims of the reform movement of Juárez in Mexico and of the revolution of 1910 in the same country was the abolition of the haciendas or at least a reduction in their size. In Chile, where most of the land is held in extensive estates, measures have been proposed looking toward the decentralization of landed property. Several Latin American countries, notably Argentina, Paraguay and Chile, have also enacted homestead laws making possible the creation of many small farms out of the national domain. Unfortunately these homestead measures came too late to accomplish what similar laws achieved in the settlement of western United States.

Against the accumulation of land in the possession of ecclesiastical organizations many measures have been enacted. This movement, begun by Spain in 1767 when the vast holdings of the Jesuits were confiscated, and continued in 1813 and 1836 when properties of the Inquisition and of religious orders were taken over by the state, extended to the new republics, notably Mexico, where it has been estimated that not less than half of the real estate in the country belonged to the clergy. Here all ecclesiastical property was finally nationalized by the government of Juárez in 1859, to be disposed of to individuals.

Efforts to abolish the aboriginal communal system of tenure have been made in most of the countries where it existed. In 1866 Bolivia declared the Indian agrarian communities abolished and their lands awarded in severalty to the individuals composing the villages. This measure, however, had little effect, since many of the communities completely ignored the law and continued to hold their land as before. The communal tenure of lands was abolished in Mexico by the constitution of 1857 and many of the village lands (*ejidos*) passed into the pos-

session of large haciendas. Similar attempts to destroy the communal system were made in Ecuador and Peru, but in these countries much of the land is still held in this ancient manner.

It is in Mexico that recent agrarian reform has been most far reaching. Here perhaps more than anywhere else were the evils of the old systems notorious. It has been estimated that in 1910 2 percent of the population owned over 70 percent of the land, and that from 80 to 90 percent of the rural population was landless in the various states of the republic. Furthermore the problem was made acute by the small amount of arable land (about 6 percent of the total), by the diverse racial elements in the population and by the proximity of the United States, where a far more democratic system of land tenure was in practise. After repeated efforts at reform had failed, the unrest finally found expression in the so-called "Agrarian Revolution" of 1910 and following years. This movement was begun, like most revolutions in Latin America, by the upper class political leaders, with such slogans as "Effective Suffrage," "No Reelection," "Mexico for the Mexicans"; but it soon assumed the character of a popular uprising against a method of land tenure to which the people ascribed most of their social, economic and political ills. After the first few destructive years the leaders accepted the popular demand for land as the principal aim of the revolution and the movement settled down to a determined program of agrarian reform.

By this revolution much has been accomplished. Large areas of public domain which had been alienated in great concessions were regained for the nation; both national and state measures were enacted looking toward the breaking up of the large haciendas; greater efforts were made to prevent the accumulation of real estate by religious organizations; and some 4000 villages have been given land, either having their *ejidos* restored or being provided with new holdings of a similar character. Altogether, over 8,000,000 acres have been added to the holdings of villages, mainly at the expense of adjoining large farms. While this last achievement marks a reversal of the Juárez policy of doing away with communal holdings, it seems to offer the only method of protecting the possessions of the large Indian element in the population, unaccustomed as they are to any other system of tenure. It is considered a temporary expedient which will serve until the

Indians become used to modern conceptions of individual ownership of land. Some attempt has already been made to allot these communal lands in severalty. In the execution of this program of agrarian reform there have been many irregularities and abuses. Some large properties have merely changed hands. Haciendas have been seized with little semblance of justice. Many despoiled landowners despair of obtaining compensation even in the form of bonds of doubtful value. Some officials have grown rich overnight. Although the reform has not yet become so well established as to assure its permanence, it seems on the whole to have accomplished much of lasting benefit to the social, economic and political life of Mexico.

In general Latin America has been slow to abandon the mediaeval institutions of land tenure brought from Spain or the communal system of the aborigines. Increased contact with the modern world, however, the development of industry and commerce, with the greater independence of labor which they bring, and the education of the masses all tend to break down these ancient institutions or to bring about that condition of discontent which has led to agrarian reform in other countries.

GEORGE MCCUTCHEN MCBRIDE

See: PEONAGE; SLAVERY; VILLAGE COMMUNITY; LANDED ESTATES; PLANTATION; LATIFUNDIA; HOME-STEAD; INDIAN PROBLEM.

For other articles related to the entire subject of agrarian movements see: AGRICULTURE; AGRICULTURAL POLICY; AGRICULTURAL LABOR; AGRICULTURAL CREDIT; AGRICULTURAL COOPERATION; CREDIT COOPERATION; AGRARIAN SYNDICALISM; LAND TENURE; LAND TAXATION; LAND SETTLEMENT; SMALL HOLDINGS; FARM TENANCY; PEASANTRY; LANDED ESTATES; RURAL SOCIETY; FARMERS' ORGANIZATIONS; PARTIES, POLITICAL; SOCIALIST PARTIES.

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AGRARIAN PARTIES. See AGRARIAN MOVEMENTS; PARTIES, POLITICAL.

AGRARIAN SYNDICALISM is a movement for the protection and advancement of agricultural interests. These ends it attempts to achieve through the organization of all agriculturists into federations or unions which foster cooperation in production, distribution or purchase of supplies, or which in some cases attempt to advance agrarian interests by parliamentary methods. Modern agrarian syndicalism originated in France, and is strongest in France and Italy. It is rooted in the long tradition of the struggle of the people attached to the soil against the aggressions of other classes.

In Germany and Austria the parliamentary battle for the defense of agricultural interests has been waged by organized political parties, whereas strictly commercial interests have been promoted by highly specialized cooperative organizations. In France and Spain, where the cooperative movement has taken root more slowly, agrarian syndicalism has assumed the role of political and commercial defender against outside encroachments, and has also become an organ of entente between the diverse elements which compete in production within the agricultural profession itself—especially proprietors and laborers.

A small local syndicate in France or Spain may function as a cooperative for collective production and merchandising of any farm product or for collective purchase and distribution of any materials required in farm production. But as a rule a syndicate of provincial, regional or state proportions relegates specific functions to specialized, subordinate groups among its membership. Such a centralized syndicate acts as the pivot of group activity, coordinates the whole movement and gives the needed direction. As part of the same movement, each cooperative occupies itself with some specialized (usually commercial) phase of that movement.

French syndicalism, as typified by the Central

Union of Syndicates of Agriculture of France, is militant in the fields of politics and jurisprudence, is an agent of rural uplift in the social life of the farmer, and attempts to protect the farmer against fraud and profiteering. Collective production and sale, on the other hand, have been left almost entirely to the functioning of cooperatives.

In Italy the Fascist doctrine has affirmed that professional unity is the basis of every economic-social action; but syndical liberty is limited in the interest of the state. The development of the Italian Federation of Agricultural Syndicates has therefore been more along commercial than political lines, and large scale enterprises have been organized as, for example, the establishment of a fleet to transport phosphate from North Africa. Another variation is found in the land holding and operating syndicates—the *affittanze collettive*. This literally means "collective lease," but is now applied to any association which undertakes the joint management of land, regardless of the form of agreement. These societies vary greatly in different parts of Italy, adapting themselves to whatever method of obtaining and occupying land is in vogue in the respective districts in which they are organized. In the north of Italy farms are acquired and operated as a whole (*a conduzione unita*) on a share or cash rental basis, according to local custom. The society assumes the functions of the farmer, providing the necessary capital and taking the risks. At the same time the labor is performed by the members of the society themselves. Collective farms arose almost everywhere in Sicily as an outcome of the activities of leagues of defense of farm laborers in their struggle for the highest possible return for their labor. Groups of laborers complemented resistance and strike as weapons in their economic struggle by collectively assuming the direction and risk of production. Often the laborers desire to possess a piece of land on which they can cultivate produce for their own subsistence, and after a farm has been acquired jointly it may be subdivided among individual members (*a conduzione divisa*).

Agrarian syndicalism in Spain has recently been extended to embrace colonies settling on the various catch basins in connection with hydrographic developments.

Before the World War two forms of collective organization were common in Russia, the *artel* (*q.v.*) and the *mir* (*q.v.*). The Soviet government has fostered both of these forms, the principles

of which have survived in the collectively operated land holdings (*kolkhoz*) and the communistic rural combines (*komkhoz*). The present aim is to increase farm production by means of these and similar agencies, which shall turn over their marketable surpluses to government agencies for distribution. The government has organized tractor and other machine bases to modernize the mechanical technique of production. Plant breeding stations are to supply improved seeds. Chains of government operated elevators are to handle the products.

The International Agricultural Syndicate embraces national federations of agricultural syndicates or, failing such, federations which effectively represent the vocational interests of farmers. The International Syndicate takes its stand on the defense of the vocational, moral, social and economic interests of agriculturists by means of the dissemination of information and the encouragement of all enterprises associated with farming. The syndicate, originally designed to embrace the states belonging to the League of Nations, has developed to world wide proportions.

LOUIS G. MICHAEL

See: SYNDICALISM; SOCIALISM; AGRARIAN MOVEMENTS; AGRICULTURAL COOPERATION; AGRICULTURAL LABOR; SMALL HOLDINGS; COUNTRY LIFE MOVEMENT.

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AGREEMENT OF THE PEOPLE. This term was applied to a document containing proposed provisions of a new constitution for England, which originated in the group known as Levellers. It was finally laid before the House

of Commons by a council of the officers of the army just before the trial of Charles I, but was never acted upon by that body. The Agreement was the first proposal ever advanced for a written constitution based on the authority of the people of England. It was sponsored by a party unable to accept the ancient form of government by king, lords and commons, but equally distrustful of the unrepresentative remnant of the Long Parliament then sitting at Westminster, and fearful of a government of mere force by the army. This party advocated instead a system of representative government defined in a fundamental document unchangeable by the legislature and in theory resting on the consent of the people, who were expected to subscribe to it.

Agitation for such a solution of the constitutional problem began in the army as early as 1647, and the central principle appears still earlier in some of the pamphlets of John Lilburne, who was the leading spirit among the Levellers. The immediate cause of the document itself, however, was the distrust of both king and Parliament aroused by the negotiations carried on with the Scots by the Presbyterian leaders in the Commons looking toward a restoration of the king without effective safeguards for the security and payment of the soldiers who had fought on the parliamentary side.

On August 1, 1647, the army presented to the king the "Heads of the Proposals," providing for a monarchy limited by law, but his fatuous belief that he could conquer his enemies by dividing them brought to nothing all such attempts at compromise. Meanwhile long discussions of the constitutional question were being held in the council of the army and on October 28, 1647, the Levellers presented to it their solution of the problem, "An Agreement of the People for a firm and present peace upon grounds of common right" (printed in Gardiner's *History of the Great Civil War*, vol. iii, appendix).

The failure of all attempts at compromise brought on the second civil war, which ended in the complete collapse of the royalist cause at Preston in August, 1648. Notwithstanding this defeat of the king the Presbyterian Commons continued to treat with him, and in September they came to an agreement with him for his restoration without guarantees either for the army or for "tender consciences." In desperation the army seized London, drove the Presbyterian members from the House, and

thus compelled the remaining members to hasten the trial of the king. In the midst of these troubles a revised and much enlarged "Agreement of the People" formulated by the Levellers was debated by a council of the officers of the army, agreed to on January 15, 1649, submitted to the Commons on the 20th, and there allowed to die a natural death.

The most important principle of the Agreement (printed in Gardiner's *Constitutional Documents*, p. 270-82) is the assertion that all powers of government are derived by delegation from the people alone. The first form of the document contains more prohibitions than delegations of power, and in this respect is more nearly analogous to the bills of rights than to the frames of government in the later American constitutions. It is interesting to note that both the 1647 and 1649 versions of the Agreement give to the government all powers not reserved to the people either expressly or by implication, the converse of the principle of enumerated powers in the American Federal Constitution.

The "Heads of the Proposals" had included a demand for the distribution of parliamentary seats "according to some rule of equality or proportion," and this general principle was made specific in the Agreement of 1649, which included elaborate provisions for representation of the English and Welsh counties and the more important cities and boroughs, but omitted the rotten boroughs. This was accompanied by provisions for a uniform right of suffrage for all resident "housekeepers" twenty-one years of age and over, with few excepted besides the adherents of the king. Many of these electoral reforms, as well as other principles of the Agreement, were put in practise later under the Commonwealth and Protectorate and even extended to Scotland and Ireland. All such reforms, however, disappeared in 1660, not to return until the passage of the reform bills of the nineteenth century.

The Agreement of 1647 declared that "matters of religion and the ways of God's worship are not entrusted by us to any human power," although "the public way of instruction" was referred to the discretion of the representatives of the nation. In the 1649 version freedom of conscience was guaranteed to all "such as profess faith in God by Jesus Christ," but with the proviso that "it is not intended to be hereby provided that this liberty shall necessarily extend to Popery or Prelacy."

Other matters scarcely less important were included among these "native rights" of the people of England, but the chief significance of the Agreement as a whole lies in the fact that some of these rights are withheld from the government by the document itself. These prohibitions on the representatives and some of the positive provisions embodied in the Agreement are alike made fundamental and unchangeable. It was a serious defect that no mode of change by the people themselves was provided and that no definite provision was made even for the means whereby the instrument was to be put into effect in the first instance. However, the chance of success even for a more perfect plan was very slight at such a time. The great importance of the Agreement is not in its influence on English institutional development but rather in the place it holds in the growth of ideas, the later effects of which are to be found mainly in America and on the continent of Europe.

C. H. McILWAIN

See: DEMOCRACY; LEVELLERS; CONSTITUTIONS; BILL OF RIGHTS; SUFFRAGE; REPRESENTATION.

Consult: CONTEMPORARY: Many pamphlets in the Thomason collection in the British Museum, especially Lilburne, John, *Legall Fundamentall Liberties of the People of England* (London 1649); Rushworth, John, *Historical Collections*, 8 vols. (London 1659-1701) vols. vi-vii; *The Clarke Papers*, 4 vols. (London 1891-1901) vols. i-ii, with the admirable preface to each volume by Sir Charles Firth (for the debates in the army); Gardiner, S. R., *Constitutional Documents of the Puritan Revolution* (1st ed. Oxford 1889) including the valuable preface; Great Britain, *Statutes, Acts and Ordinances of the Interregnum*, ed. by C. H. Firth and R. S. Rait, 3 vols. (London 1911); Great Britain, Parliament, *The Parliamentary History of England*, 36 vols. (London 1806-20) vol. iii.

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AGREEMENTS, INTERNATIONAL, are contracts between states which are in most cases expressed in treaties, conventions, protocols and other such formal or informal documents. In general an international agreement is the under-

taking of an obligation by competent authorities and, because systems of government have been autocratic, the competent authorities are usually conceived as "heads of states" or governments as distinct from peoples. The contracting parties are therefore usually referred to as "high." There is, however, a tendency in many nations toward increasing the share in government of all sane adults—a tendency called democratic—and therefore the parties to international agreements are in some cases the "peoples" whose instruments or agents are the governments or heads of states. Moral responsibility for fulfilling the contracts rests upon those who have the actual power, whether the "people," or that small group which in most cases has an effectual influence, or the actual rulers in any state. The agreements, being between states, that is to say, persons in a political relationship, do not affect citizens taken separately, and are morally binding apart from changes of the system of government until the contracting state disappears.

The present system of agreements began about the sixteenth century, although personal agreements, similar to commercial or marital contracts, were made by rulers in all ages. The present state system, however, grew up under the influence of the theory of sovereignty, which used to imply in external affairs the moral isolation of each state and the absence of any responsibility on the part of each ruler or government in regard to other peoples, rulers or governments. International agreements were therefore once supposed to depend for their binding force upon the free choice of the parties, which obscurely implied that they had no binding force at all. The fantastic atomism of this conception was corrected by the early jurists who sought in a "law of nature" some explanation of the fact that sovereigns did appear occasionally to keep their word. Personification of the state, however, which omitted the major characteristic of personality, namely, moral responsibility, weakened the binding force of agreements; and the mythology connected with the actual exercise of power obscured the responsibility of those who held power. It has, nevertheless, always been obvious that international agreements would be useless unless most of them were in practise binding, and at no time have men been deficient in the feeling that their promise had some force to restrain their future acts. On such experience have depended the growth in the number of

international agreements and the criterion of the subject matter they cover.

Limitations of the operation of agreements exist if the contracting parties have already made other agreements on principles invalidating certain kinds of obligation. For example, the Covenant of the League of Nations in regard to the registration of treaties, and the Pact for the renunciation of war "as an instrument of national policy," are believed to invalidate secret military agreements and all treaties following wars whose terms are enforced. It is assumed in all cases that no agreements are valid which include obligations to do immoral acts. Secondly, the phrase *rebus sic stantibus* expresses the limitation understood in the case of agreements, that is to say, that circumstances must remain fundamentally the same if the obligation undertaken is to be morally operative. Whether a revolutionary change leaves the circumstances fundamentally the same is questionable, but in practise some approach of one party to the other is understood to be necessary before the circumstances can be regarded without prejudice as having changed fundamentally. An agreement is not morally inoperative if it is repudiated by only one party to it. Again, an agreement entered into under duress is not a real agreement, because one party is not free to choose. Conventionally, hitherto, since war was regarded as a legal method of deciding issues, obligations undertaken after defeat have been regarded as binding, but international morality seems to have developed almost as far as to imply the absurdity of this even in international law. Again, agreements may be rendered void by later agreements or by later statements of international law; or they may expire on the dissolution of a state party to the agreement; or they may be repudiated by one party if violated by the other; or they may contain express provisions as to the duration of the agreements.

The number of international agreements now operative is said to be about 25,000 (see Myers, D. P., "The Control of Foreign Relations" in *American Political Science Review*, vol. xi, 1917, 24-58). Up to June 30, 1928, 1765 agreements were registered under Article 18 of the Covenant of the League of Nations. These agreements may be roughly classified so as to show what services the state system now provides. First, there are lawmaking treaties, declarations, etc., which express or modify existing customary rules of interstate inter-

course, which are the basis of international law. The Geneva "Red Cross" Conventions of 1864 and 1906, and the Final Act of the Hague Conference, 1899, are examples of lawmaking agreements which affect the future actions of the signatories. Some such agreements, however, express new rights acknowledged universally, as, for example, the Treaties of London of 1881 and 1889 with respect to the neutrality of Belgium, and the Minorities Clauses of the Treaties of 1919 and 1920 with respect to Poland, Rumania, etc. Secondly, all agreements which are not lawmaking may be subdivided into (a) those which envisage war or all the results of war, e.g. treaties of peace, alliance, guarantee, neutrality, etc.; (b) "economic" agreements either in matters of commerce, transport, property, etc., or in matters of employment and labor; and (c) agreements with regard to public health or the promotion of scientific or educational activities. These three divisions correspond to the three classes of services performed by modern government. The agreements under each heading are therefore means by which each state performs its services for its own citizens and subjects, by cooperation with other states. Inevitably each state thus performs services for those who are not its own citizens or subjects but are within the jurisdiction of the other state or states parties to the agreements. This implies the existence of a state system such that no state can now reasonably be conceived as a segregate world, in the original theory of sovereignty. If sovereignty, however, means only the responsibility of an autonomous unit in a social whole, then the word has some applicability.

Agreements, commercial or other, are entered into by private groups of persons who are under the jurisdiction of different states (international combines, shipping "conferences," etc.), and these create an international atmosphere within which government is compelled to operate internationally. But the interdependence of different governmental systems, which is expressed in agreements, delimits the competence of the instruments of government (assemblies, parliaments, etc.) within any state—the state in an agreement remaining a unit, whether its unity is expressed by the executive or by some power of its legislature. In Great Britain the crown expresses the unity of the system of government; in other countries written constitutions define the instrument of interstate intercourse, as in the United States, where the president, but only

with the consent of the Senate (Article 2 of the Constitution), is the instrument. Legislation to make obligations undertaken by agreement operative within any state, is limited by the terms of the interstate relationship. A new type of agreement, however, sets up organs to which states transfer the performance of certain tasks (e.g. the International Commission of the Danube), and such organs, as well as the states, may make agreements. Thus it is believed that the League can, in international law, become a party to a treaty, although this has not so far occurred.

The nature of international agreements has obviously been undergoing rapid development in recent years, and the state system now tends to produce new administrative interlocking of specialized departments for commerce, labor, etc., which are in relationship across frontiers, independently of foreign offices and the old diplomatic system. Thus states no longer are in contact only at one point in their "circumference," but interpenetrate administratively. International agreements, like municipal law, are tending to be not prohibitions or protections but contracts of cooperation in common tasks.

C. DELISLE BURNS

See: TREATIES; EXECUTIVE AGREEMENTS; ALLIANCE; SANCTION; SOVEREIGNTY; INTERNATIONAL LAW; INTERNATIONALISM; LEAGUE OF NATIONS; WAR.

Consult: Oppenheim, L. F. S., *International Law*, 2 vols. (4th ed. London 1928) vol. i, p. 700; Briery, J. L., *The Law of Nations* (Oxford 1928); Satow, E. M., *Guide to Diplomatic Practice*, 2 vols. (London 1917) vol. ii, p. 172; Butler, G., and Maccoby, S., *Development of International Law* (London 1928); Potter, P. B., *Introduction to the Study of International Organization* (New York 1922); Crandall, S. B., *Treaties; Their Making and Enforcement* (2nd ed. Washington 1916); Wright, Quincy, *The Control of American Foreign Relations* (New York 1922) ch. xiv; Mathews, J. M., *The Conduct of American Foreign Relations* (New York 1922) chs. viii-xiii.

AGRICOLA (Latinization of Georg Bauer) (1494-1555), physician, natural scientist and father of the written technology of mining and metallurgy. He was born at Glauchau, Saxony, graduated from the University of Leipsic, and taught Latin and Greek at the Municipal School of Zwickau, later being principal there. In 1522 he went to lecture at Leipsic. He spent the years 1524-26 in studying philosophy, medicine and natural sciences in Italy. In 1527 he became town physician of Joachimsthal, a rapidly growing mining town in Bohemia founded eleven years before. He spent his leisure in visiting the mines and smelters, in reading all

the Greek and Latin literature he could find on the subject of minerals and mining, and in acquiring knowledge from the more intelligent of the skilled workmen. He also purchased a share in a profitable mine, resigned his position as physician, and spent two or three more years in travel and study. In 1533 he became city physician at Chemnitz, a famous mining town in Saxony, and lived there until his death in 1555. Columella's treatise *De re rustica*, which reached its fifteenth or sixteenth edition before Agricola died, inspired him to attempt a service to the mineral industry similar to that Columella had rendered to agriculture. In 1530 he published *Bermannus* (Basel 1530), written in dialogue form and correlating the minerals mentioned by the ancients with those found in the Saxon mines, and in 1546 the first work on physical geology, *De ortu et causis subterraneorum* (Basel 1546), in a volume containing *De natura eorum quae effluunt ex terra* (Subterranean Waters and Gases). He also wrote *De natura fossilium*, the first systematic work on mineralogy; *De veteribus et novis metallis*, chiefly a history of metals; and *Interpretatio germanica vocum rei metallica*, a glossary of Latin and German mineralogical and metallurgical terms. His masterpiece *De re metallica* (Basel 1556) appeared after his death. This work in twelve books, freely illustrated, covers the whole range of mining and metallurgical science as known to him. It passed through ten editions in three foreign languages, and for two centuries remained the best work on the subject. It was an immense advance over anything that had previously appeared; for, instead of following the speculative methods of the Greeks, it is based on accurate observation. Herbert C. Hoover, who made the only English translation of it (London 1912), unhesitatingly says that Agricola's ideas on the origin of ore deposits are much sounder than those of Werner whose writings, 250 years later, are generally regarded as the foundation of economic geology. Agricola was a contemporary of Paracelsus and deserves a much higher place in the history of science than the latter, although his works have received much less attention, probably because miners and metallurgists pay great attention to improvements in technology and but little to its history. The importance of his contribution to the building up of a sound technology of the mineral industry can hardly be overemphasized. He was probably one of the greatest factors in bringing about the industrial revolution in

Europe through converting into applied science the empirical practises then used in the production of metals. In addition to doing his scholarly work he was active in public life in Chemnitz and held many offices there.

THOMAS T. READ

Consult: Hoover, H. C. and L. H., biographical introduction to their translation of *De re metallica* (London 1912); Darmstaedter, E., *Georg Agricola, 1494-1555, Leben und Werk* (Munich 1926), containing an extensive analytical bibliography; Schmid, F. A., *Georg Agrikola's Bermannus* (Freiberg 1806); Jacobi, G. H., *Der Mineralog Georgius Agricola und sein Verhältniss zur Wissenschaft seiner zeit* (Zwickau 1881); Hofmann, Reinhold, *Dr. Georg Agricola* (Gotha 1905).

AGRICULTURAL COLONIES. *See* LAND SETTLEMENT.

AGRICULTURAL COOPERATION.

GENERAL. Broadly understood, agricultural cooperation represents the application of cooperative principles to the needs of the agricultural population. Agricultural cooperation as thus interpreted has as many subdivisions as there are distinct economic interests which can be promoted by combined action. So interpreted, agricultural cooperation cuts across the usual functional classification of cooperative forms. However, the more useful notion of agricultural cooperation is much narrower; it is limited to those varieties of cooperative effort which serve the needs of the agriculturist as one engaged in the farming business. Generally speaking, the contacts of an agricultural enterprise with the outside world center about the borrowing of capital funds, the purchase of equipment, materials and supplies as well as of services incidental to the basic production process, and the disposition of the product. Ordinarily, therefore, agricultural cooperation comprises rural credit cooperation, cooperative purchasing of farm equipment and supplies, and cooperative processing and marketing of products.

The nature of services rendered and the type of members served give a clue to the distinctive characteristic of agricultural cooperation as a movement. It is the only important branch of cooperation resting upon a large mass of small business units as a base. Only in agriculture has the small scale producer shown ability to survive competition with larger units, and only in agriculture has it been possible to utilize cooperative principles for the promotion of busi-

ness efficiency. The paradox of a cooperative movement with a business membership is more apparent than real. It is just because the farmer realizes his inadequacy as a business man that he seeks the help of a cooperative which will relieve him of many of the important business duties otherwise so difficult and burdensome.

However, the business character of the membership leaves its peculiar impress on the movement. The ties between the members and the organization are not as many sided or as durable as are found in labor cooperation. The much talked of individualism of the farmer, often indistinguishable from the assertive independence of the petty business man, makes it hard to induce him to join a cooperative and to keep him actively interested once he has been enrolled. On the other hand the gross receipts per member, and hence the capitalization, of an agricultural association are far larger than in other forms of cooperation. It is not surprising therefore that general principles of cooperation are modified in several ways when they are applied to agriculture. The "one-man-one-vote" rule is adhered to quite generally, although the voting power is frequently proportioned to the amount of business furnished by each member and in some cases voting by proxy is allowed. Moreover agricultural cooperatives are generally open to new recruits from among the farmers. However, capital is often attracted at the cost of paying market rates of interest on members' shares and of permitting the ownership of more than one share. Also, in order to mitigate the depressing effect of competition on prices, members are not allowed to leave the organization when it is temporarily advantageous, although they may usually leave at stated intervals. It is significant that the instrumentalities employed in effecting these desirable results are not so much an appeal to the solidarity of interests as the tangible weapon of greater returns. Enforceable contracts are of real, although incidental, help in holding members together.

The real mission of agricultural cooperation is not to bring about a fundamental reconstruction of the business regime but rather to save the farmer from the disabilities entailed by the small size of his business and his lack of training in the ways of a commercial civilization. To accomplish this it must not merely supply all the needed services at reasonable prices but must also attempt to "rationalize" the production side of its members' business. Within lim-

its the farmer must be taught what and how much to produce, what is the best equipment to use and what occasions warrant the borrowing of fresh capital. In this as in its other activities agricultural cooperation may expect assistance from the state, because it attempts not to displace but merely to perfect the existing economic order. The comparative generosity of state aid is another feature which sets it apart from other forms of cooperation.

Conditions for the development of modern cooperation in agriculture were being prepared when the commercialization of economic life began to impinge upon the small agricultural producer. As business has grown and increasingly larger units have developed during the nineteenth century, the situation has become continually more precarious for the small, peasantlike proprietors who, with unbusinesslike methods, have waged an unequal struggle against the towns. The towns first of all absorbed the industries which had been closely associated with farming. Next they developed business men and sales organizations which as bargainers were more than a match for the small farmers. This meant that the farmers were hopelessly at a disadvantage in the struggle to hold their own. In certain countries, notably England, a larger and more aggressive type of farmer got control of the land and was able for a time to meet the business world on its own grounds. On the continent, especially in such countries as Switzerland, Austria, Germany, France and Italy, the struggle of the small farmer was a real one, often a tragedy. It was in these countries that cooperation among farmers first flourished.

So far as is known, the first instance of modern agricultural cooperation occurred in Switzerland, beginning in 1815. This was a cheese making enterprise at Kiesen, and consisted merely of a group of dairymen banded together on the basis of turning the milk into cheese, each man being left with his cheese to dispose of as best he could. This plan was subsequently adapted to all manner of undertakings connected with the processing of agricultural products for the market. Another less common form of this type of quasi-productive cooperation is the cooperative ownership of implements and machines. There are many instances of this among the small farmers on the continent, but very few in England and the United States, a disparity which is partly due to the relatively large size of the English and

American farm. Because of the individualism of the farmer, cooperative ownership of machines is restricted to small farms, for which it seems an essential condition of survival. For the same reason there are only rare cases of collective cultivation of the soil. With the exception of a few instances in Italy and Russia, which are the result of peculiar circumstances, one would search in vain for genuine examples of cooperative farming.

Neither from the manufacture of raw products into a commodity demanded by the market nor from the ownership of equipment was the principle of cooperation carried over into the field of agricultural production proper. Instead the principle was applied with considerable success at the opposite end of the farming business, the point at which the farmer comes into contact with the market, in the sale of his products and in the purchase of his supplies. In the first of these, at least, cooperation has succeeded so well that it surpasses in importance the earlier form from which it sprang—the processing of farm commodities for consumption. Indeed processing at present is undertaken only in combination with marketing.

Cooperative marketing serves a well defined need. Even before the days of high pressure salesmanship, the farmer could not be as efficient in disposing of his produce as those who were engaged in selling as a special business. He is not fully conversant with market opportunities, nor is he always cognizant of the precise shape and form in which his produce may be wanted. Even if he is in possession of all the relevant information, it may be uneconomical for him, because of the relatively small sales of any specific item, to bring his product to the best market or to put it in the form wanted. To take butter as an example: the best of cream may be produced on almost any good dairy farm, but to turn this cream into butter requires hundreds of dollars' worth of equipment, unless primitive and expensive hand methods are used. To market the butter from an individual farm is either not feasible at all, or at best expensive. The farmer is therefore forced to leave a large part of his marketing to an agent, either a merchant or a cooperative company of which he is a member.

In its marketing phase, perhaps more than in any other, agricultural cooperation differs from what is ordinarily understood by cooperation. As an organization a marketing association adopts the form of a business concern

with a variety of security issues arranged so as to preserve the equitable distribution of control between members and to allow for considerable borrowing of funds from the outside. Its dealings with members are not unlike those of a commission house which makes a settlement with its customers on the basis of price received for the produce less the commission charge for handling it. The important differences are, first, the limitation of its services to members, although even this is not always the case, and second, the way in which the cost of handling is computed. While the charges of the commission house bear no apparent relation to the expenses incurred by the house, those of a non-profit making cooperative must obviously be based on cost. The way in which expenses incurred are transmuted into deductions from gross receipts varies according as each member's produce is handled independently or is pooled with that of other members. The method of settlement with members is also affected by the length of time for which the produce is pooled, that is, whether it is intended for immediate sale or is to be manipulated by the cooperative for the length of perhaps an entire season in the hope of selling it at the best possible price. The "manipulation pool" gains in importance with the development of "commodity marketing," which attempts to control a sufficiently large stock of a single commodity to insure a real influence in the market. Obviously an organization of this type differs also from an ordinary commission house in that it must control the disposition of produce by its members; it cannot allow them to sell to other concerns if it is to build up and preserve its position in the market.

A local marketing association can do a great deal for the farmers by pooling their produce, establishing agencies in more distant markets, helping to put the commodity in a marketable form and finally by increasing through combination the bargaining power of its members. The efficiency with which these services are rendered is in direct relation to the size of the organization. The greater the number of individual farmers combined, the less is the expense of handling the produce and the more impressive is the influence exerted by the organization in the market. The advantages of size can be achieved in several ways: small local associations may federate and set up a directing center to which certain important functions may be delegated; or an association may attempt

expansion more directly by increasing its membership and having local branches for immediate contacts; or it may enter into contractual arrangements with other associations for a limited length of time. The method by which an organization overcomes the difficulties involved in the dispersion of its membership depends upon the importance of services which must be performed locally; upon the homogeneity of its potential membership; and finally upon the stage of development which cooperation has reached when an increase in size appears urgent. If strong local associations have grown spontaneously and have been at least moderately successful, if the raising of a particular commodity is in the hands of both large and small producers, if no particular savings can be effected by doing grading, packing and storing on a larger scale than is possible for a local association, then the federation or contract devices are the more practicable methods to adopt. Otherwise a centralized organization is preferable.

Among the best examples of farmers' selling organizations of Europe are the Danish butter and bacon companies. The great share of Danish butter is made in cooperative factories, under state inspection and control so far as quality and grades are concerned. For many years Danish butter has been rated at the top in quality. Its main market is England, to which it is sent through several export federations with agents in England. These butter companies have long been recognized as models of efficiency. Of similar character are the well-known "bacon factories" of Denmark. One of the most significant features of the Danish cooperative bacon companies is their control over production. They do not directly limit the amount of swine which may be delivered, but they do prescribe, within narrow limits, the type and quality. Since the authorities at cooperative headquarters now and then change the margins among grades so as to make it more profitable to send hogs to market at one weight rather than another, they are also in a position to increase or diminish the supply of hogs at the time according as lighter or heavier weight is preferred. Thus the quantity of bacon made during a given season can be appreciably controlled or at least greatly influenced.

While in Denmark and several other countries, such as Ireland and the Netherlands, the marketing associations are the outstanding type of cooperative effort, other European countries

excel in cooperative purchase of supplies wanted by the farmers. Europe as a whole is far in advance of America in cooperative purchasing. Here again it is the small size of the farm which furnishes an essential condition for cooperation. Much as the small farmer is interested in cooperative selling, he is still more concerned with cooperative purchasing. He is often near a good market for sale, such as an open air city market, but finds himself at a hopeless disadvantage in dealing with people from whom he must make purchases. Not only is machinery to be bought, but from year to year it is necessary to buy commercial fertilizers. In these latter purchases there has always been until recently a great chance for fraud, and where fraud was absent there was at least an opportunity for the dealer to take a high margin of profit. The cooperative company has an advantage over many private dealers in being able to buy in large quantities and for an assured market. Again, the cooperative market can render a great service in the matter of credit, first, by encouraging cash payments, and second, by providing credit at cost where it is really needed. On the continent, especially in Germany, cooperative buying is closely associated with credit cooperation of the rural type.

UNITED STATES AND CANADA. In America conditions are quite different from those in Europe. The farms are in the main larger; the farmers are more independent in economic matters and as cooperators they are harder to deal with. Successful cooperation is mainly of the sales type, although in the sections of the country where markets for selling are good, and where agriculture is of such a character as to require heavier purchases of goods needed in the round of production, the buying side is proportionately more in evidence.

Cooperation began in the United States much as in Europe, as a means by which certain small farmers could manufacture dairy products into forms which could be marketed. The first known instance of this was the cooperative making of cheese in the state of Wisconsin in 1841. Cooperation in the manufacture of cheese and butter has grown to great proportions; at first progress was slow, but since 1890 it has been persistent and widespread. Other lines of cooperation began, largely during the seventies, inspired by the Grange.

The occasion of the rapid growth of the Grange was clearly that of a surplus of agri-

cultural produce; the trouble was not merely a weak demand in the ultimate markets but also a serious disorganization in the channels from producers to the market. Lack of grading, involving ignorance on the part of producers of what they were offering for sale; high and unregulated freight rates; middlemen who were able to make wide margins; a wholesale trade so far removed from the farmer and his comprehension of big business as to lead to all manner of suspicions; retailers unregulated by law, without the restraining competition of mail order houses or chain stores—all these combined to produce a multiplicity of both real and imagined grievances among farm people. They were easily induced to form cooperative companies, some of which succeeded, more of which were ill-starred.

While there were sporadic instances of cooperation in the manufacture of cheese and butter before the days of the Grange, and likewise a few efforts at cooperative grain selling, there were but a small number of such undertakings, and these not very important or stable. The Grange was instrumental in launching cooperation in butter and cheese manufacturing, taking these operations, often permanently, out of the home. At the same time grain and livestock shipping companies, or rather groups, were organized. The majority of the cooperative companies were not incorporated, while the rest were incorporated under the general corporation laws. When reverses came, as they were bound to come, the so-called cooperatives either went out of existence or became ordinary business units owned and managed for profit. By this means numerous farmers became business men, left their farms and moved into the villages. In spite of the fact that the Grange was instrumental in starting hundreds of cooperative undertakings, only a few were still in existence by 1880, four years after the beginning of the decline of the Grange. The remaining units were mainly organizations for the purchase of farm and household supplies, and these were located not in the heart of the farming district but in the eastern states.

The Farmers Alliance ran a very similar course in relation to cooperation, organizing and inspiring the organization of a number of companies. The story of their successes and failures is almost the same as that of the Grange period. The majority of the undertakings were in the Southwest and Middle West. They suffered both from the lack of a proper legal

foundation and the lack of intelligent leadership. The alliance itself came virtually to an end in the early nineties. The cooperatives it founded struggled on, with here and there an instance of survival which suggested permanence. This period covers the years from about 1880 to 1892.

In 1902 two farmer movements came to the front: the Farmers Educational and Cooperative Union and the American Society of Equity. Both undertook, more exclusively than had their predecessors, to solve the marketing problem. Both organized local cooperatives, including consumers' societies and selling companies. The Equity and its successor, the Equity Union, went even farther than the local undertakings and established several centralizer creameries, some of which are making over three million pounds of butter per year. Each of these organizations has established local livestock shipping associations, combined later into central livestock exchanges. Central grain exchanges have been attempted. The Farmers Union has established several big and apparently successful exchanges for handling supplies for farmers and their families. It cannot be said that either the union or the Equity has solved the problem of cooperation, yet they have both promoted very important cooperative companies.

The American Farm Bureau Federation, which came into existence in 1919, gave promise of sweeping the cooperative field. Unfortunately its most prominent effort, designed to revolutionize the marketing of grain, came to an untimely and inglorious end. The dairy marketing plans have not been put into practice and are not being pushed. The influence of the Farm Bureau has been important in connection with many marketing undertakings, yet it has not been a revolutionizing force within the field.

Real success in cooperative marketing of agricultural products has been achieved only for a comparatively few commodities, and has been due to those immediately concerned in the operations rather than to outside inspiration. That is not to say that cooperation is of no importance in the sale of some portion of all leading agricultural products. There are cooperatives, local and central, in the marketing of grain; of livestock; of dairy products, including milk, butter and cheese; of fruits and vegetables; of poultry and eggs; of cotton; of tobacco. Approximately 11,000 cooperative marketing companies are doing business at the

present time in the United States; their aggregate membership, including some overlapping, is about 2,000,000. The amount of business done has in some years reached \$2,500,000,000, or not far from a quarter of the annual sales of farm produce. In general these companies are bringing greater returns to the farm than could otherwise be obtained.

The cooperative marketing of fruit offers some of the most conspicuous examples of success. The California Fruit Growers' Exchange stands out as a model in many important particulars. Some forty years ago the citrus growers of southern California found themselves growing fruit for which there did not appear to be a sufficient demand. The prices offered were so low as to result in severe losses to the growers; often the prices would not cover the cost of picking and boxing fruit after it was ripe. As a result of the feeling that local private shipping companies were getting too much for the services rendered, attempts to organize cooperatives were made as early as 1891 and 1892. In 1895 the Southern California Fruit Exchange was organized. This company had many ups and downs, but was able to overcome difficulties sufficiently to keep going. In 1905 the name was changed to California Fruit Growers' Exchange. This organization, with the bulk of the citrus product under its control, has won a respectable place for itself in the business world. Its cost of doing business is remarkably low; its command of the market is as near to perfection as is often reached by any organization not having a monopoly; its return, therefore, to the individual member is such as to commend itself to the great majority of growers.

The company is composed of local associations of growers, twenty-two district exchanges and the central exchange. The locals own and operate packing houses and equipment for handling the fruit. The district exchanges are composed of locals, each local electing one representative to the district board. In turn the central exchange is composed of the districts united through a board, each district furnishing one representative. Sales are made by district managers acting under the advice of the central exchange sales department. Pooling is done through the locals, over lengths of time varying from a month to the full season, as they may agree upon.

The California Fruit Growers' Exchange does the largest business of any single cooperative company of the United States. Its sales in

1927 reached \$85,000,000. Sales are made through agents, usually by auction, in all cities of considerable size. Not infrequently this organization is accused of exercising monopoly control over the orange and lemon trade. This is true only in a very restricted sense. To begin with, it exercises no control over the planting of orchards. Even the supply coming to the market it can regulate only indirectly. The secret of its success lies in the fact that the exchange is in a position to take advantage of market conditions in a way which is open only to big, efficient organizations. It has at hand, almost hourly, complete information in regard to its market, with the aid of which it is able to direct fruit to the places where it is most wanted and away from points where there is a threatened oversupply. Moreover the supply sent is varied on the basis of probable returns, the growers being advised to pick and ship for table use an amount not in excess of a given quantity, the balance to be sent to by-product plants for the manufacture of citrate of lime, lemon oil and the like. As a rule these plants handle only the inferior fruit; however, when prices are low, a correspondingly higher grade will be used in this manner.

The California Fruit Growers' Exchange, together with another much smaller cooperative citrus company of California, markets over 80 percent of the citrus fruit of the state. A large part of the Florida citrus fruit is likewise co-operatively marketed.

The producers of milk, butter and cheese have had real occasion to look for better markets and to demand better marketing facilities and treatment than the commercial companies have afforded.

The dairymen furnishing milk for all the larger cities of the United States are organized into bargaining companies through which agreements with city milk distributors are made. As cities have grown and have had their milk supplied by increasingly larger areas, it has become evident that the individual dairyman was helpless as a bargainer against the highly organized city distributors. The early efforts at organizing the fluid milk dairymen were not very successful. In recent years, however, some forty associations, several of which deal with the distributors of more than one city, have reached a degree of development which promises to be permanent. These associations vary in membership from a few hundred to over fifty thousand. So far the prices are made by

the bargaining parties on the basis of what the market will apparently stand without cutting off the demand or over-stimulating the supply. The prices paid by the distributors of milk have been much higher in relation to butter-fat values since the organization of the cooperative than was formerly the case.

Cheese making is much more localized than the production of butter. This accounts for the earlier efforts on the part of cheese producers to establish a cooperative marketing system. There are two main cooperative companies: the National Cheese Producers' Federation, with headquarters in Wisconsin, and the Tillamook County (Oregon) Creamery Association. These associations undertake to grade and sell the product of the cheese factories which belong to the federations. They are handling about one tenth of the cheese of the country.

Since butter is made in almost every county of the country, the butter producers are a widely scattered group. For many years it was evident that the butter market was in need of reorganization. Apparently the private dealers had made all the progress they were capable of; still they left much to be desired. In 1921 a cooperative association of large proportions and with an ambitious program was launched in Minnesota. This organization, known as the "Land o' Lakes Creameries, Inc.," was not the first attempt of its kind, but at present it is the outstanding instance of the cooperative marketing of butter. Since a large percentage of the creamery butter of the country is made within a few hundred miles of St. Paul, it was logical that this city should become the center of cooperation in the selling of butter. The company comprises between four and five hundred cooperative creameries, over a third of the whole number of such creameries of the three states of Minnesota, Iowa and Wisconsin. It has accomplished remarkable things in the matter of changing the quality of butter, increasing the proportion of the high grades and also increasing the demand for it. Its sales are now approaching the hundred million pound mark, and its receipts are distinctly above the returns available through other channels. The returns are better because the butter is more economically handled, going through fewer hands and being shipped to its destination by more direct routes.

Cooperative grain marketing got under way after the unsuccessful attempts made in the first years of the twentieth century. Over four

thousand elevators were cooperatively owned. These elevators have done well in reducing the local costs of handling grain. They have never been able to federate effectively for handling grain on the central markets or for export. Several states have highly centralized wheat pools, but for the most part their successes have been nominal. In 1929 the Farmers National Grain Corporation was organized to provide a national marketing agency for these pools and local elevators. It has the support of the government and its main purpose is to arrange for the orderly export of grain to relieve the depression in the American market. The organization is still in its incipient stages, so that little of significance can be said of it at present.

In Canada wheat pools have reached great size and have attained a high degree of perfection. They are conducted on the federated plan. In recent years they have handled over half of the wheat, and some of the other grain, sold by the farmers of the western provinces. They conduct an export business, maintaining agencies in the leading foreign markets. These pools, three in number, acting jointly through a central sales agency, do the largest business of any cooperative on the continent; their gross receipts are about twice as large as those of the California Fruit Growers' Exchange.

So far we have dealt with cooperative marketing and with but a few instances of cooperation in the processing of agricultural produce. In America other applications of cooperation to agriculture are few and thus far have not attained great importance. However, we may briefly mention the more important undertakings.

Of these the more specifically agricultural types of cooperation are found in irrigation and insurance. About six and a half million acres, or slightly less than a third of the land under irrigation, are watered by cooperative companies. Irrigation is a process which lends itself quite well to this type of management. In insurance the conspicuous examples of rural cooperation are the numerous farmers' mutual fire insurance companies. In some states, notably Pennsylvania and Iowa, they are state-wide in their operations and carry a large share of the risks of this sort. In Michigan the "Gleaners" carry life insurance and fire insurance and also act in a limited manner as a credit society.

The American countryside has had and continues to have many examples of consumers'

cooperation among the farmers, but they are neither successful nor important. Again and again cooperative stores have been started, and while the number of new ones is usually considerable, the whole number hardly increases from year to year. The casualties among them are high, especially in periods of falling prices such as that following the World War. While cooperative stores are successful in Europe, it seems impossible for them to gain a foothold in America, at least while conditions remain the same as at present. Two institutions militate against the cooperative store: the mail order house with its attractive prices and good service, and the chain store with its narrow margins on which the retail work is done.

In concluding we may note some recent developments which point to the disappearance of some of the old problems and the emergence of new tendencies in agricultural cooperation. The early efforts sponsored by the Grange were defeated partly because of the lack of a legal foundation for the work of cooperatives. This has been remedied by state and federal legislation, mostly since 1900. Acts were passed providing for the incorporation of cooperative companies, giving them security and advantages which they could not enjoy under the general corporation laws. The new legislation and court decisions permit organization along Rochdale lines (limitation of shares and distribution of dividends according to patronage), the creation of non-stock associations with net returns settlements, and make the contracts between a marketing association and its members enforceable against the latter by allowing the collection of "liquidated damages" and the use of injunction and specific performance proceedings. Laws have also been passed providing immunity to cooperative companies from antitrust laws in cases where technically the marketing companies appeared to make themselves liable to prosecution.

Related to changes in law is the emergence of governmental support to agricultural cooperation. Nearly all states have departments of markets which almost without exception have facilitated the work of farmer cooperatives. Experiment stations have made a series of studies which have served to furnish information concerning the successes and difficulties attendant upon the workings of cooperative undertakings. The Bureau of Agricultural Economics of the federal Department of Agriculture has a division of cooperation, the purpose of which is

to study and promote the interests of cooperation among farmers. Through the War Finance Corporation and the Intermediate Credit Act the federal government has put money at the disposal of cooperative companies. Finally the new Federal Farm Board has been active in stimulating the organization of national agencies of cooperatives which could undertake a regulated export of agricultural products. The recently organized National Chamber of Agricultural Cooperatives, a combination of marketing cooperatives, is to exert pressure upon the government and public opinion of the country as well as to promote a further increase in membership of these cooperatives.

The recent trends in cooperation are clearly toward larger units. It has been demonstrated again and again that cooperative companies, like other organizations for doing business, cannot hope for success while running on the basis of small output. The cooperative creameries, for example, which were started forty years ago, were designed to accommodate the farmers dependent upon a load hauled over poor roads by horses. Now with good roads and gasoline trucks the sphere of activity may well be four times as extensive. The larger cooperatives of all sorts show the lowest unit costs.

Again, and this is even more significant, cooperative companies in the past have viewed the market as a great stronghold to be attacked and conquered. Now it is evident that any successful attack must be accompanied by organized action respecting the use to be made of the conquered forces. In the early years of cooperation it was taken for granted that the market could absorb all possible production at a remunerative price, if only the predatory characteristics of those guarding access to the market could be subdued. Now it is understood that marketing means taking care that the demand for goods be not demoralized by oversupply. This is the greatest lesson, and one of the hardest for the farmer to learn. In this phase of the subject little progress has been made, but the outlook is hopeful.

BENJAMIN HORACE HIBBARD

See: COOPERATION; CREDIT COOPERATION; CONSUMERS' COOPERATION; AGRARIAN SYNDICALISM; AGRARIAN MOVEMENTS; FARMERS' ORGANIZATIONS; RURAL SOCIETY; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL POLICY; GRANGE; FARMERS ALLIANCE; FARMERS UNION; FARM BUREAU FEDERATION, AMERICAN; MARKETING; AGRICULTURAL MARKETING; AGRICULTURAL INSURANCE; IRRIGATION; FOOD SUPPLY; FRUIT INDUSTRY; DAIRY INDUSTRY; FOOD

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AGRICULTURAL CREDIT. Credit for agriculture differs in important particulars from credit for other purposes. First to be noted is the small size of the usual producing unit. From a credit standpoint this means a large number of small loans to administer, approximating consumer's credit in this respect, especially in countries with many small holdings. The greater the number of borrowers among whom a given volume of loans is divided, the better the burden of risk is distributed; but unless each risk is scrutinized carefully, the advantage of such distribution is lost. The small size of the producing unit makes impossible the organization of the enterprise on a corporate basis with limited liability of stock holders, and thus greatly restricts the sources of agricultural credit. Moreover, if a business is large enough to be incorporated, its entrepreneur can ordinarily sell stocks and bonds for most of the capital needed, whereas if it is not large enough to be incorporated, the entrepreneur must ordinarily provide nearly half of the capital himself. A further consequence is that the individual borrower is weak in bargaining for loans.

Next in importance is the close relationship between the business and family affairs. The capital available for any farm business is largely dependent upon the financial status of the family. A farmer with limited resources borrows with difficulty, almost regardless of his managerial ability. A young man in agriculture ordinarily has to wait until he has acquired some capital of his own before he can borrow the additional capital he needs to start even as a share tenant, and even then his operations are likely to be restricted because he cannot obtain capital enough. He must wait until he has acquired much more before he can start as an owner-operator. Hence such matters as age at marriage, size of family, family thrift, standard of living, and desire for education for the family, profoundly affect farming operations through affecting the rate of accumulation of capital and the amount of capital that can be borrowed. In this respect agricultural credit is somewhat similar to credit for retailing and shopkeeping, and in distinct contrast to industrial credit. However, when business and living are closely associated, as in agriculture, owning the business becomes necessary in order to insure a per-

manent home for the family, whereas retailers and shopkeepers are more content to rent their places of business indefinitely, thus reducing their credit needs.

Inheritance also figures in an especially important way in the problem of agricultural financing. The settlement of an agricultural estate ordinarily requires the sale of the property, or at least the writing of a mortgage against it. Each new generation of farmers starts with a new crop of mortgages. In many countries under normal conditions the new mortgages written when estates are passed on have nearly equaled the payments on existing mortgages, so that the total burden of farm mortgage indebtedness in the country has tended to remain about constant. In the United States this process has been greatly disturbed since 1900 by the rapid rise in price levels and land values up to 1920, and the rapid decline in land values since then. In general farmers have made larger payments on their mortgages in the United States than in Europe; but they have also more generally followed the practise of retiring, while still in their early advanced years, to the villages or small cities and selling or renting their farms. The recent depreciation of money greatly reduced for a time the mortgage indebtedness on farms in several countries of Europe.

From the standpoint of the credit agency, the combination of farm business with living makes it difficult to draw the line closely between loans for production and those for consumption purposes. A loan for an automobile is clearly of this confused sort. A loan to build a new farm house cannot be looked upon purely as a consumption loan. In the southern cotton states of the United States a large volume of loans is made to farmers to meet their living expenses while the crop is growing. This practise prevails to a greater or less degree in all regions depending largely on cash crops. With farming so little and so lately removed from a largely self-sufficient condition, farm entrepreneurs are not likely to understand the credit aspects of their businesses or to keep the proper sort of financial records. Many will want loans that are not good risks; but more will not appreciate possible advantageous uses of loans. This places an added responsibility on the loaning agency.

A distinction perhaps should be made between loans for production and loans for marketing, the latter including loans to farmers' cooperative marketing associations or dealers

of various kinds, covering the operations of transportation, storage, processing and merchandising. Marketing loans may be for very short periods covering the time required to move produce through the marketing channels, or for as much as a year or longer to permit the carrying over to another year of produce from a year of large surplus. Marketing loans negotiated by regular middlemen tend to be treated as regular commercial loans.

The self-sufficiency of the farm unit is an important factor in its credit needs. The general drift in agriculture is clearly toward more dependence on the market for household and farming supplies, but it is easy to exaggerate the extent of this movement. Even in the United States, where agriculture has been commercialized as much as anywhere, 20.3 percent of the value of farm production between 1923 and 1928 was food and fuel used by the farm household. Where holdings are small, as in most of Europe and Asia, the farm produces a much larger proportion of the family living, and the marketable surplus of any one farm is very small. These circumstances reduce still further the size of the loan required by the individual farm, and at the same time the amount of cash income available to liquidate loans.

There are a number of important characteristics of agriculture growing out of its close dependence on nature which affect the character of its credit. One of these is the slow turnover of its current operating capital. Frequently the ninety days which is the usual limit for commercial paper is too short a period for the repayment of crop or livestock loans. Sometimes six or even nine months are needed if the selling is not to be hurried. Some loans, however, such as those for feed for milk cows, may be liquidated in thirty days. Another characteristic of agriculture is the low ratio of operating to fixed capital. Perhaps only a few months are needed to mature and harvest a crop, but a large fixed investment in land, buildings, machinery and work stock is required in the first place. Although only a few weeks elapse between the purchase of dairy feed and the receiving of the returns for the milk or cream sold, a large investment is involved in the dairy herd.

A factor of some importance in contrasting agricultural and commercial credit is the device of production by stages. In industry there has developed a vast scheme of separation of the whole manufacturing process into parts or stages which are carried on in separate plants, usually

under more or less separate management. This means that each of these plants needs a loan for only a short period, until it can dispose of its product to some unit next farther along in the process. This development has the effect of shortening the period for which commercial loans need to be made, and of increasing the ratio of the operating to the fixed capital. In agriculture production by stages has developed to a considerable extent in the case of a few products, such as the growing of young animals in grazing regions and the fattening of them in grain areas, but development along these lines has been nowhere as marked as in industry; nor is it likely to proceed very rapidly. In fact more significant at present is the increasing practise of growing feed and keeping livestock on the same farms or ranches.

No doubt the greatest importance of natural factors in the agricultural credit problem is in the element of risk. Estimates of the total crop damages in the United States for the decade from 1909 to 1919 are as follows: wheat, 28.77 percent; corn, 31.99 percent; oats, 24.52 percent; barley, 28.65 percent; flaxseed, 36.44 percent; rice, 19.04 percent; hay, 20.35 percent; potatoes, 30.12 percent; tobacco, 20.35 percent; cotton, 35.49 percent. These data are averages of estimates made by crop reporters and must be understood as subject to an uncertain amount of bias in either direction. The damage results almost entirely from climatic misfortunes and from plant diseases and pests. In individual areas and in individual years it may be much more severe, amounting frequently to complete crop failure, occurring sometimes two or three years in succession. Moreover most of the foregoing forms of crop damage affect a large area at a time, frequently several states. This means that any local institution, such as a local bank or even a Federal Reserve Bank or an Intermediate Credit Bank, may find the security of a large part of its loans affected at one time. If, however, crops are short over most of the area where produced, the price may rise more than sufficiently to offset the reduction in yield. Nevertheless the more usual situation is that the crop will be short or especially short in some part of the area, constituting a real impairment of credit obligations in that section.

Of almost equal importance is the risk that the weather will be so propitious over most of the producing area that prices will be very low. Unusually large acreages may produce the same effect. Not only are many of the farmers unable

to meet their loans fully under such conditions, but they may need to hold their crop until late in the marketing season in order to obtain a price that is reasonable for such a supply. A large crop may glut the marketing channels if it is sold in the usual percentages by months.

The livestock risks are not so great as the crop risks. Seldom are whole herds wiped out by droughts, storms, floods or disease epidemics. Nevertheless enough damage to livestock occurs to make risk a real factor in the problem. Loans on feeder stock take the chance that the price will decline between the dates of purchase and of sale and thus wipe out the margin of gain. However, where the farmer has the feed available, such loans are properly considered good risks.

The hazards described are greater to the banker for the minor than for the major crops, because fluctuations in acreage and yield are proportionately greater. The lesser crops are likely to be more localized and hence all subject to the same weather effects at one time. Risks are greatest in specialized farming areas and cash-crop areas. Combined livestock and crop farming offers fewer hazards than crop farming alone. The close relation between the farm business and family living becomes a factor in risk in that in many cases the family living must first be provided out of the income from crops before any payment can be made on the loans.

Loans on farm real estate have the usual real estate hazards, such as fire and tornado, which can be insured for the most part, and also those of price decline and unusual depreciation from misuse of property. Land values are more subject to "booms" than are building values, because buildings can easily be reproduced at cost. Also, when land values recede they recede over wide areas, as in the whole of the north Atlantic section of the United States from 1880 to 1900. In newer farming areas, as in the northwest states, land values fluctuate somewhat with rainfall periods. The possibilities of exploitative farming add to the hazards of misuse of property in agriculture.

It is sometimes thought that further commercializing and capitalizing of agriculture will greatly change the nature of its financing and remove many of the limitations described. In areas where farms are getting larger and farming less labor-intensive, undoubtedly operating loans are larger and more frequent and somewhat more commercial in character. But changes

in this direction are proceeding slowly at present, even under the unusual influences existing in the United States. No doubt a lack of capital is an important limiting factor in the sections where new systems of farming which require more livestock or machinery are involved. Lack of capital is also preventing the purchase of the larger acreages of land needed. Capital will not flow in readily so long as the basis of the loan is a mortgage on a family farm, even though it be an enlarged family farm—principally for the reason that larger farms mean larger mortgages than are considered good risks. Yet it seems probable that the family farm, enlarged as new conditions require, will continue to be the major basis of operation. Large scale operation in one unit promises to have a real, but after all a limited, development. Chain farming systems—family units under one general supervision—may easily have a more important development. Such organization plans permit corporate organization and sale of stock as a means of raising the fixed capital. Loans for current operations will be larger and somewhat more liquid with such organizations. These developments, however, will occur only in certain regions. Taking the world as a whole, small units will probably continue to prevail and the changes affecting credit will be in the nature of a slow increase in production for the market and an accompanying greater use of banking facilities.

A more promising development for overcoming the limitations of credit for agriculture is that of consolidation of the loans of small units by various types of cooperative and semi-public credit institutions such as have been developed particularly in Europe and the United States. As a basis for discussion of these institutions a more complete analysis of the various credit needs is essential. The customary classification of these needs is threefold: short term, intermediate and long term. In the United States short term credit is ordinarily limited to six months; intermediate credit, to periods of from nine months to three years; and long term credit, to periods of five years or more.

The short term needs for credit are principally for labor, feed, fertilizer, seed, sprays, livestock for feeding purposes, the holding of crops for a market, twine and sacks, boxes, barrels and other containers. The labor needs are conspicuously for the final harvesting operations but also for the planting operations and to a lesser extent for the care of the growing crops. Borrowed funds are also sometimes used in part

to hire the labor that cares for livestock on the range or in the feed lot. As already stated, in some situations loans are made for living expenses while the crop is growing. In general farmers are more likely to meet their regular labor bills than most other expenses out of current receipts. Loans to hire labor for the regular farming operations are often far from liquidating within the period of a short term loan—the labor is often partly upon growing livestock, land improvements and the like. Loans for seed become very important in the case of a few crops, notably wheat, potatoes and garden crops. Such loans are entirely liquidating within three to nine months, if the season is not bad. Fertilizer loans are extremely important in the old cotton states of the United States, and in many sections of the Old World. Most fertilizer applications extend their benefits over more than one crop, and hence loans for such purposes may be only partly liquidating in one season. Where fertilizer is used regularly the carry-over from earlier applications makes up the difference. The only livestock loans that are liquidating within the period of short term loans are those for young cattle, pigs and lambs to go into the feed lot in the autumn, or into pastures in the spring as grazers. Loans for these purposes are ordinarily for six months. In market milk areas milk crops may become the basis of such loans if the farmer has most of the needed feed available. Loans to buy feed are made to farmers who have the livestock but not enough feed or not the proper kind of feed to make a balanced ration. Such loans are highly liquid. Loans to finance the holding of farm products by farmers and others are sufficiently liquid as long as the loan is for an amount safely below any probable price decline, and the products are in safe storage. There is a serious question whether the farmers themselves can be trusted to exercise the best judgment as to when to hold and when to sell; a wide price margin is thus essential. Cooperative organizations may in time exercise better judgment than the farmers acting singly; and the market analysis provided by public agencies may also prove to be of great assistance.

The credit needs commonly placed in the intermediate class are the following: farm buildings, land improvements such as clearing, draining and liming, fencing, farm machinery, work stock, breeding stock, milk cows, and orchards and small fruit stock. Many of these, such as farm buildings, land drainage and orchard stock, especially, are not liquidating within the ac-

cepted period of an intermediate type of loan; and in practise they are often covered by regular real estate mortgages running usually for five years. Farmers frequently expect, however, to be able to repay loans for such purposes within two or three years out of the regular income of the farm, and hence would prefer a shorter instrument than a regular real estate mortgage. Also, many such loans are too small to make a regular real estate mortgage desirable. In many cases the farm already has a mortgage upon it which it may not be possible to enlarge or to supplement with a second mortgage. In practise in the United States farmers are often able to borrow the funds for such purposes at their local banks on notes which they keep on renewing until they are all paid. But this arrangement works badly in a period of credit stringency, such as that following the World War, when a large volume of "frozen credits" is produced. Loans for breeding stock, milk cows, work stock, farm machinery and small fruit stock come much nearer to liquidating within the accepted period of intermediate credit.

Long term land credit is commonly secured by mortgages. In the United States the most usual periods for farm mortgages are still five years and ten years, although an increasing number of them are long term amortization mortgages. In Europe the amortization mortgage is much more common. The practise is also developing of dividing heavy loans into first and second mortgages at different rates of interest. Farms are also frequently bought on a contract to pay at a certain rate, together with interest, until enough has been paid to make a mortgage secure.

The slow turnover of capital in agriculture was early recognized as a difficulty in the handling of agricultural loans by commercial banks. Erick Bollman, an early writer on banking in America, said in 1816: "Banks in farming districts are a nuisance." The farmers in turn complained that the commercial banks did not serve them as well as they did the merchants and frequently opposed them. Some of the early banks made loans to agriculture rather freely, even going so far as to use loans on farm lands as the basis of banknote issues. But trouble followed sooner or later in most cases. In consequence, when the National Banking Act was passed in final form in 1864, national banks were forbidden to take real estate as security for loans. Furthermore the requirement of \$50,000 of capital stock for cities of 6000 or less kept banks

from being formed in the agricultural districts. The farmers got much of their credit from merchants and manufacturers of farm machinery. But state banks began to increase in numbers presently, and in 1900 the National Banking Act was amended to permit banks to organize with only \$25,000 of capital in cities or villages of 3000 or less. Then followed a period of rapid increase in banks, as a result of which even rural communities, except in the South, were well supplied with banking service—frequently too well supplied. But the difficulty of slow turnover of capital remained. The Federal Reserve Act of 1913 was the next important forward step. It made six-month agricultural paper eligible to discount by the Federal Reserve Banks, and allowed member banks to make a limited number of mortgage loans on real estate. The Federal Reserve Board has interpreted its provisions liberally, even accepting six-month loans for the purchase of livestock and farm machinery such as tractors. In some of the agricultural states over half of the discounts in 1918 were on agricultural paper. The evidence is now clear that in 1919 and 1920 the Federal Reserve Banks discounted too large a volume of agricultural paper maturing in six months, an important factor in the credit stringency which developed in 1920-21.

In the meantime the Federal Farm Loan System had been established in 1917, with twelve regional banks and a supplementary system of joint stock land banks, for the purpose of loaning to the farmers on land mortgages for the purchase of land, equipment, livestock or fertilizers, or for erecting buildings or improving land. The mortgages must run for not less than five or more than forty years, and are to be paid on the amortization plan. Bonds are sold to obtain the funds loaned.

Intermediate credit was provided by an additional act in 1923 which established an Intermediate Credit Bank in each of the twelve Federal Farm Loan districts, affiliated in management with the Federal Farm Loan banks, and coordinate with them under the Federal Farm Loan Board in Washington. These banks may purchase or discount notes, debentures or other securities of banks, agricultural credit corporations and cattle loan companies. They make loans directly to cooperative associations but not to individual farmers. The loans must be for not less than six months nor more than three years. The funds are raised chiefly by the sale of short time debentures secured by the

rediscounts. The Act of 1923 also permitted the Federal Reserve Banks to rediscount agricultural paper up to nine months. In 1926 about a sixth as much six to nine month paper as three to six month paper was rediscounted.

In 1927 the Federal Farm Loan System was carrying \$1,825,000,000 of farm mortgages and the life insurance companies \$1,999,000,000, the two together carrying forty percent of the farm mortgage loans of the United States. The business of the Federal Loan System is growing at the rate of about \$100,000,000 a year. The Intermediate Credit Banks have had a very limited growth, the total loans for the five years (1923-27) being \$374,000,000 of direct loans to cooperatives, and \$257,000,000 of rediscounts, almost all of these being loans by credit corporations and livestock loan companies.

The further needs of the agricultural credit system of the United States are loans to tenants to enable them to purchase farms; loans to good farmers in the poorer agricultural districts; the transferring of more intermediate credit from country banks, where it is being carried on notes and renewed as needed, to the intermediate credit system, so that when the next credit stringency comes the country banks will not have so many "frozen loans"; strengthening of the country banks; and provision of credit on better terms for the southern states. The intermediate credit system needs to be more aggressively administered.

The two principal agricultural credit systems of Europe are those of Germany and France. The German system is a mixture of cooperative and public, and that of France a mixture of private and public, about like our Federal Reserve System. Long term mortgage credit is provided in Germany by nine *Landschaft* banks, which sell debentures and make amortization loans running from thirty to seventy-five years. These are cooperative in that the members are unlimitedly liable for the loans; but are public to the extent of being granted special public prerogatives, such as the right to take possession of property without foreclosure. Intermediate credit for land development has been provided for by a system of public agricultural improvement banks, which, however, have not been widely used. Other forms of intermediate credit and short term credit are provided cooperatively by small local credit associations, known as *Raiffeisen* and *Schultze-Delitzsch* banks, both operating for the most part on the basis of unlimited liability. This is especially true of the

former. These public and cooperative agencies compete for business with an extensive system of strictly private farm mortgage companies and banks and commercial banks.

In France land credit is provided by the *Crédit Foncier*, modeled after the *Landschaft* banks but now maintaining the same relation to the public as the Bank of France, that is, a private institution with certain public privileges and responsibilities. Its loans are on amortization mortgages running from ten to seventy-five years, or on one to nine year mortgages without amortization. The *Crédit Agricole* is an adjunct of the *Crédit Foncier* which makes short term and intermediate loans. The cooperative credit institution in France is known as *Crédit Agricole Mutuel*.

JOHN D. BLACK

See: CREDIT; CREDIT COOPERATION; LAND MORTGAGE CREDIT; FARM LOAN SYSTEM, FEDERAL; CATTLE LOANS; FEDERAL RESERVE SYSTEM; BANKING, COMMERCIAL; AGRICULTURAL MARKETING; AGRICULTURAL INSURANCE; AGRICULTURAL COOPERATION; FARM TENANCY; AGRICULTURE.

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AGRICULTURAL ECONOMICS.

UNITED STATES. As a separate branch of the social sciences in the United States agricultural economics has been in existence scarcely a quarter of a century. Agricultural colleges, authorized in the Land Grant Act of 1862, were actually established only after the Civil War, and legislation in 1887 provided for a system of experiment stations joined to the teaching institutions. The work of both these agencies, however, as well as that of the United States Department of Agriculture and state departments of agriculture, was organized primarily on a technological basis, and their field

of research and teaching was limited to the natural sciences as applied to agriculture. The federal government had, from the days when agricultural matters were handled by a section of the Patent Office, given some attention to commercial or economic problems as they arose, but it was not until 1922 that the Department of Agriculture formally organized a Bureau of Agricultural Economics. In like manner agricultural college faculties had from time to time made broad pronouncements on agrarian questions, but formulated their opinion concerning such issues on the basis of rather meager scientific investigation. The delimitation of agricultural economics as a special field of work in state institutions lagged behind even its tardy development in the United States Department of Agriculture.

Agricultural economics as a comprehensive treatment of the business phases of farming has developed from several more particularized interests, especially farm management, marketing, land policy and rural credits. In the early years of this century a small group of workers in the Office of Grass and Forage Plant Investigations of the Bureau of Plant Industry of the United States Department of Agriculture began to study actual practices on various farms with a view to determining why some farmers succeeded while others failed. In 1905 this work was recognized to the extent of being made the special task of a separate Office of Farm Management in the bureau. This office conducted numerous farm management studies emphasizing cost accounting, and in 1912 W. J. Spillman, in charge of the office, published a bulletin entitled "What is Farm Management?" (U. S. Department of Agriculture, Bureau of Plant Industry, *Bulletin no. 259*). This discussed in considerable detail the actual work of the office and also the general principles which it advocated for the successful organization and operation of the farm.

Meanwhile George F. Warren had been for some five years developing similar lines of activity at Cornell University. In 1911 the experiment station of that institution presented a detailed farm management survey of Tompkins County (Cornell Agricultural Experiment Station, *Bulletin no. 295*), which was the beginning of a large development of such work by experiment stations throughout the country. In 1913 Warren published a college text on *Farm Management* (New York), which was the pioneer work in the field and is still in wide use.

That conditions were ripe for development of this field was evidenced by the rapid spread of farm management courses in agronomy departments of most of the important agricultural colleges, generally followed by the setting up of a separate farm management department in the college and a farm management section in the affiliated experiment station.

The interest in problems of foreign markets, agricultural prices, marketing methods and reforms dates from the beginning of commercial agriculture in the United States. This interest received a sharp impetus from the "high cost of living" discussions which attracted such wide attention in the years immediately following 1909. An Office of Markets was established in the United States Department of Agriculture in May, 1913, to deal specifically with this group of problems. Meanwhile state departments or bureaus of marketing were being formed, classes in marketing were being organized in not a few of the larger agricultural colleges, and both research and teaching in this field were being expanded and to some degree systematized.

Somewhat broader than either of these special approaches was the movement begun at the University of Wisconsin about 1902 by Henry C. Taylor with the support and aid of Richard T. Ely. Although Taylor was primarily interested in the economics of production, he was less strictly commercial than the members of the farm management group. He was more concerned with problems of agrarian policy, particularly as related to land utilization and land tenure. The first book which included the term "agricultural economics" in its title was published by Taylor in 1905 (*An Introduction to the Study of Agricultural Economics*, New York). This volume had no sections dealing with marketing, rural finance, agricultural labor, wages, standard of living, costs of transportation, taxation or related problems that are so important in subsequent discussions of the farm problem. ✓

At the same time that Taylor and Warren were establishing agricultural economics as a discipline in the agricultural college, Thomas Nixon Carver, approaching the same problem from the field of general economics, was conducting a regular class in agricultural economics at Harvard University, and in 1911 published a textbook of *Principles of Rural Economics* (Boston), followed five years later by a book of *Selected Readings*. Although the *Prin-*

ciples had a strongly classical flavor it supplemented previous writings by providing a "historical sketch of modern agriculture" and a systematic discussion of the "distribution of the agricultural income" as wages, rent, interest and profits. It contained also a chapter on problems of rural social life which discussed rural population, standards of living and group organization for the improvement of rural conditions.

Since the appearance of these three pioneer books, a voluminous literature has grown up. It includes several other general treatises and a host of specialized books on marketing, co-operation, credits, agricultural commerce, tariffs, economic history of agriculture, agricultural geography and the recent farm depression. A veritable flood of bulletins has come from the state experiment stations and the United States Department of Agriculture. *The Journal of Farm Economics* is in its eleventh volume (1929) and runs above five hundred pages annually. It is the official organ of the American Farm Economic Association, which has a membership of nearly nine hundred.

The discussion of theoretical aspects of the subject has lagged behind the flow of current and specialized material. This is a natural consequence of the practical character of much of the work in the field and the fact that the whole matter has been in rapid flux, with immediate problems monopolizing the attention of most of the workers. The situation is being remedied by the appearance of such volumes as John D. Black's *Introduction to Production Economics* (New York 1926) and Clarence L. Holmes' *Economics of Farm Organization and Management* (Boston 1928), which reflect the tendency toward broadening the theoretical foundations of the discipline. Equally strong is the tendency toward improvement of the statistical technique applied to the analysis of many of the problems presented.

The scope of research programs and the methods used in the several branches of the field have been reexamined recently by the Advisory Committee on Social and Economic Research in Agriculture of the Social Science Research Council. This committee, representative of all groups of workers and schools of thought, is responsible for a survey which provides a comprehensive and critical analysis of the entire range of methods of research and indicates quite clearly the trends of development. Further, more detailed investigations for

the separate branches of the discipline may be expected from the representative subcommittees of the advisory committee.

In the last decade the United States Department of Agriculture has considerably enlarged the scope of its work relating to economic aspects of agriculture. Particularly helpful was the consolidation of the Office of Farm Management and Farm Economics, the Bureau of Crop Estimates and the Bureau of Markets into a comprehensive Bureau of Agricultural Economics. This bureau, with its large staff of trained workers, carries on a comprehensive program in the gathering and analysis of data. It occupies a position of leadership among the state agricultural experiment stations, complementing their work and supplementing their resources where local funds and personnel are inadequate. Each state, however, is entirely free to develop an independent program dealing with local problems and meeting local needs. In general state as well as local interest and financial support have turned increasingly toward the study of the economic basis of agriculture in recent years, and the Purnell Act of 1925 makes available to each state experiment station an annual sum amounting to \$60,000 (in 1930 and thereafter), of which one of the chief specified uses is the expansion of research work in agricultural economics.

Meanwhile agricultural economics has been progressing rapidly as a teaching discipline. There has been an increase in residence and extension teaching in colleges and universities. The secondary schools also have turned their attention to this subject as a part of their programs of vocational agriculture; they have sought to develop both subject matter and methods which should meet the needs of those whose training will not go beyond the high school stage. Measures have been taken to assist the teaching and research personnel in securing advanced graduate training to a larger extent than has been possible hitherto. This is bound to produce not only an improvement in teaching but also a more thorough grounding of agricultural economics in general economic theory.

E. G. NOURSE

EUROPE. Agricultural economics in Europe is of considerably earlier origin than in America. For nearly a century *Agrarpolitik* (agriculture in relation to state and society) has been an established university course in Germany.

As early as 1851 Léonce de Lavergne, of the Institute of Agronomy at Versailles, gave a course in *économie rurale*. Emile Levasseur devoted to rural economics a part of his *Cours d'économie rurale, industrielle et commerciale*, first published in 1869. In some countries teaching still follows the outlines formulated by the early trail breakers. However, most of the present day college and university courses are a reflection of current research interests. Viewed in this light, agricultural economics is a development of only the last thirty years.

Since agricultural economics deals with practical problems, it is not surprising to find that the emphasis laid on the different branches of the discipline differs from country to country. In England "costings" have received the major portion of attention. In Denmark, Switzerland, Czechoslovakia and Sweden simpler farm accounts form the basis of agricultural economic research work. Norway is interested in the statistical measurement of the results of varying degrees of intensity of culture. Political events in central Europe have centered attention upon the land reform movement involving problems connected with the transformation of large estates into small properties. The agricultural economist of Italy has developed to a high degree the technique of farm land and farm income valuation. In France rural law and legislation are basic considerations. On the whole one is struck with the general absence of market and price studies so popular in the United States.

Of all European countries Germany, perhaps more than England, represents the fullest and most advanced development of agricultural economics. In addition to their interest in *Agrarpolitik* the Germans have devoted extended attention to farm management (*landwirtschaftliche Betriebslehre*), agricultural credit and co-operation, farm labor and the economics of land tenure and of land settlement. The students of farm labor are devising methods for increasing labor efficiency. In attempting to "taylorize" the farm the leaders of this new specialty (Seedorf at Göttingen, Falke at Leipzig and Derlitzki of the Farm Labor Experiment Station at Pommritz) have conducted researches dealing with the psychology of personnel management, analysis and standardization of tasks, relation between tool and task, environmental conditions of work and systems of payment. German economists pursue the study of the problems of land tenure and settlement with

unrivalled intensity. The foremost institution in this field is the Forschungsinstitut für Agrar- und Siedlungswesen, established by the government in 1921 and directed by Max Sering of the University of Berlin. Its numerous publications dealing with a variety of economic-agricultural subjects display a distinctly international viewpoint.

England, like Germany, has a well developed program of organized research in the general field of agricultural economics, notwithstanding what might be termed a too weighty dependence upon "costings." It is one of the few countries devoting organized research attention to the marketing of agricultural products. The Agricultural Economics Research Institute at Oxford under the direction of C. S. Orwin and the Ministry of Agriculture and Fisheries constitute coordinating centers. The institute has from its foundation in 1913 emphasized cost accounting as a method of research. The ministry also maintains an agricultural economic advisory officer at a number of colleges and universities for the purpose of conducting cost accounting studies. There is a definite realization that the restricted number of farms that can be handled by the "costings" method seriously limits the application of its results. During the last few years the tendency has been to experiment with other research tools, such as the collection of farm financial records and a wider use of the survey in order to furnish a broad base for generalizations, even though these will be less exact in details than "costings" figures.

Simpler methods of farm accounting for research purposes are used in Switzerland and Denmark. Ernst Laur, professor of rural economics at the Zurich Polytechnicum and director of the Union Suisse des Paysans, set the example for the extended use of accounting in obtaining farm organization data and research material on the economic status of a nation's agriculture. For the past thirty years the union has conducted each year a short course in farm accounting attended by a selected group of farmers from various sections of the country. Those who attend these courses agree to submit their accounts to the organization annually for analysis. As a result of this practise Switzerland has perhaps a larger volume of reliable data on the economic phases of her agricultural operations than any other country.

In Denmark the accounting methods are similar, but the records, instead of being kept by

the farm operators themselves, are compiled by paid consultants employed by cooperative book-keeping societies. Denmark had in 1927 about sixty agricultural bookkeeping organizations with over one hundred paid consultants. For research purposes the records of the local societies are analyzed by the semi-official central organization known as the Bureau of Farm Management and Agricultural Economics (Det Landøkonomiske og Driftsbureau) and directed by O. H. Larsen, professor of rural economy at the Royal Veterinary and Agricultural College in Copenhagen.

The Institute of Agricultural Accounting and Rural Economics at Prague (Zemědělského ústavu účetnickosprávového Československé republiky), directed by Professor Vladimír Brdlík, also deserves mention. It published in 1926 an extensive four volume statistical analysis in several languages of the organization and output of agricultural production in Czechoslovakia.

Agricultural economics in Italy places an emphasis upon land valuation. This is due to the fact that the system of property taxes and of taxes on agricultural incomes, originally based on the principles of the "Milanese Census" of 1718, which measured and mapped each property as a basis for its valuation for tax purposes, has since developed into a complicated and intricate process of evaluating sources of farm incomes, calling for considerable training. In Italy the work of appraising land and farm incomes approaches a profession. The best examples of Italian scholarship in this field are Luigi Einaudi's "La terra e l'imposta" in *Annali di economia* (vol. i, 1924) and O. Bordiga's *Trattato di stime rurali* (2 vols., 1923-25).

No summary of the development and status of agricultural economics in Europe can fail to note the importance of unofficial agricultural associations as research and extension agencies. Throughout Europe these associations perform many of the educational, research and extension functions ordinarily handled by public agencies in the United States. Reference has already been made to the Union Suisse des Paysans. Boerenbond Belge and the Deutsche Landwirtschafts-Gesellschaft are also noteworthy examples of associations of this type. Perhaps the most influential farmer-controlled organizations from the standpoint of economic research and extension are the agricultural chambers as they exist in Germany, Austria

and Hungary. These chambers maintain experiment stations, conduct short courses and issue publications. Economic problems have a definite place among their numerous activities. The activities of the International Institute of Agriculture at Rome are also largely economic in nature. Three of its four major technical divisions deal with economic and social questions.

ASHER HOBSON

See: ECONOMICS; RURAL SOCIOLOGY; MARKETING; FARM MANAGEMENT; PERSONNEL MANAGEMENT; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL EDUCATION; AGRICULTURAL EXPERIMENT STATIONS; LAND SETTLEMENT; LAND VALUATION; AGRICULTURE, INTERNATIONAL INSTITUTE OF; FARMERS' ORGANIZATIONS.

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AGRICULTURAL EDUCATION. Education in agriculture is manifestly age old, arising slowly out of experience and the ancient philosophies concerning the nature of the world and the mysteries of plant and animal life. In its formal aspects, however, as a phase of technical or vocational education propagated by means of schools and societies, it is relatively a recent development. Modern science had its beginnings in the sixteenth and seventeenth centuries, and a long time elapsed before it came to be significant for agriculture. The University of Halle, founded in 1694, led the way in the introduction of new methods and subjects, including what were then beginning to take shape as the natural sciences. Locke, Rousseau, Pestalozzi and Philipp Emanuel von Fellenberg (1771-1844) were later noteworthy for their important contributions to education in natural science and to the development of schools of practical arts and manual labor, using farming and gardening as a basis. Much progress had been made in the teaching of the natural sciences by the end of the eighteenth century, and a number of important agricultural schools date from that time: in Bulgaria at Tirnova (1791); in Hungary at Zarvas (1779), Nagy-Micklos (1786) and Keszthely (1797); in Germany at Moeglin (1806), Tharandt in Saxony (1811) and shortly thereafter the agricultural college of the University of Leipsic and the agricultural college at Hohenheim (1818); in France at Grignon (1829).

The progress of science in relation to agriculture was especially stimulated by the researches in agricultural chemistry of Sir Humphry Davy (1778-1829) in London, Jean Baptiste Boussingault (1802-87) in Paris, Justus von Liebig (1803-73) at Giessen and Munich, and by the work in botany of Carolus Linnaeus (1707-78) at the University of Uppsala. During this same period, zoology, geology and mineralogy, important factors in the study of agriculture, also took shape as specialized fields of science.

While in a measure progress in agricultural education and experiment was a concomitant of progress in natural science, the fruitful application of the knowledge and methods of science to agriculture awaited more than a

century of development in the applied fields of natural science. But during the seventeenth and eighteenth centuries there developed in Europe a body of literature on agricultural subjects which played an important part in furthering the movement for agricultural education.

Throughout the nineteenth century the countries of central and western Europe matured and diversified their facilities for agricultural education and research. The maintenance of such facilities came to be regarded primarily as a function of government, although privately supported institutions and others fostered and maintained by voluntary farmers' societies, often with state subsidies, continued to develop. In general, elementary and secondary schools of agriculture profited most from the early impetus and soon became widespread. At present they differ greatly in organization and scope in the several countries, revealing adaptation to local requirements under the differing conditions as to literacy, agricultural resources, national wealth and public policy. These schools are predominantly the places where young persons are trained for farming, and they emphasize the acquirement of practical skills. As a result the colleges and university departments of agriculture have been freed for the higher aspects of education and research and they attract persons whose primary purposes are to prepare for scientific and professional posts and for the management of large properties. The close of the nineteenth century found these higher institutions in some of the central and western European countries on a sound scientific basis, the acknowledged leaders in the training of men, and models of organization.

Following the European War of 1914-18 there was a noteworthy expansion in every country of Europe. In respect of both lower and higher agricultural education and of facilities for experiment and research, the grants for new institutions and for the strengthening of existing institutions far surpassed in amount and significance the expenditures during any similar period in history. The acuteness of the food supply situation during the war and the urgency of subsequent economic rehabilitation unloosed new impulses and relatively large public funds for the substantial development of scientific agencies to aid farmers. While in other continents, with the exception of North America, there has not been comparable expansion, in every civilized country progress has been marked during the first quarter of the present century.

Facilities for experiment and research were developed during the nineteenth and early twentieth centuries both as parts of colleges and university departments of agriculture and as independent institutions. Throughout Great Britain and the continent the so-called agricultural experiment stations were, and are, typically independent institutions, each devoted to a single major field of agriculture, physically and administratively dissociated from the colleges and universities. There are a few exceptions. By reason of the existence of many independent experiment stations for the solution of problems of immediate practical utility, the scientists in the colleges and university agricultural departments and institutes have enjoyed greater freedom quietly to pursue knowledge in whatever direction their abilities and inclinations led them and to devote themselves to the broader, fundamental aspects of their fields.

With the exception of the British institutions, the college and university departments of agriculture in Europe have no responsibility for that modern educational device known as extension teaching. Such work, called agricultural propaganda in Europe, proceeds either directly from the ministries of agriculture or, more commonly, from farmers' societies, which frequently receive governmental subsidies for the purpose. Some form of propaganda service for agriculture now exists in nearly every European country, with the possible exception of Austria, Hungary, Rumania and Czechoslovakia, where this type of service is less clearly differentiated.

The progress of agricultural education and experiment in Europe supplied the pattern and the stimulus for its development in America. Of special influence in the early efforts in the United States was the work of the manual labor schools of Fellenberg at Hofwyl, Switzerland. Between 1819 and 1840 many schools of similar type were established in the United States, with agriculture and various mechanical arts as the center of interest. While many of these efforts were short lived, they laid the foundations for later successful institutions. Societies for the promotion of agriculture were the chief agencies in calling attention to the need for experimentation and demonstration in agriculture, for the selection and improvement of cattle, for the development of an agricultural literature and for the organization of courses and schools of instruction. Agricultural fairs, based on the successful English models, were

organized even in colonial times, and after 1807 these became important and permanent educational agencies, especially for the comparison and improvement of livestock. Agricultural periodicals, which began to appear at the close of the eighteenth century, served not only to set before the people useful information on a wide range of agricultural subjects but also to focus the attention of farmers and others on the desirability of establishing institutions in the United States for the teaching of science as well as the theory and practise of agriculture. Furthermore, prior to 1850, chairs of natural history, of agricultural chemistry and of agriculture as such found place in some of the colleges and universities of this country. These and other efforts combined to prepare for the great forward movement in agricultural education in the United States which came soon after the middle of the century. The first of the present system of agricultural colleges was chartered by act of the Michigan legislature on February 12, 1855.

The most significant legislation for agricultural education in the United States is the Morrill or Land Grant Act of July 2, 1862. It provided grants of public lands to the several states and territories, based on their representation in Congress. The proceeds from the sales of these lands were to be permanently invested and the income therefrom inviolably applied to the creation and maintenance of institutions, of which there was to be at least one in each state, and which were to give instruction in agriculture and the mechanic arts as well as in other scientific and classical subjects. These Land Grant colleges and universities were designed particularly to afford the industrial classes both a liberal and a practical education and subsequently have had a profound influence. Not only have they become the primary centers for higher education and research in agriculture and the mechanic arts, but many of them have risen to the first rank in the liberal arts and in the professions. Because of their sudden establishment in all of the states, their early years were full of difficulties. Qualified teachers in natural science were few, and there were practically no persons trained to teach agriculture. Agricultural textbooks were largely of foreign derivation, and there was very little tested knowledge based on American conditions. Little progress had yet been made in laboratory methods in science. Farming operations were crude, and in the agricultural depression which

followed the Civil War there was little incentive for students to take up a college study of agriculture. For thirty years the enrolments in agricultural courses were low, and farmers were skeptical. But progress was being made, teachers were being trained, facilities assembled, texts prepared, laboratory methods worked out, public confidence won, and in time the economic and the social as well as the scientific value of this vast educational undertaking was demonstrated.

Congress increased its financial aid to these colleges by the passage of the Second Morrill Act of 1890 and the Nelson Amendment to the Second Morrill Act in 1907. From the first, and in increasing extent, the state legislatures appropriated state funds to these institutions, and in most of the states such appropriations now constitute the chief source of support.

From the establishment of the Land Grant colleges and universities, the making of experiments and scientific investigations was considered an essential part of their work. It was apparent that if these institutions were to serve the country they could do so only through the development of a body of tested knowledge. By 1870 the organization of experimental work had begun. In 1875 the first of the formal agricultural experiment stations was established at Middletown, Connecticut (it was moved to New Haven in 1877), and in the following ten years such stations were established in sixteen additional states. These efforts led to federal legislation (Hatch Act, 1887; Adams Act, 1906; Purnell Act, 1925) for the establishment, and later the fuller development, of experiment stations in connection with all the Land Grant colleges and universities. The development of organized research marked the beginnings of vitality and public confidence in these institutions.

The long depression in farming came to an end about 1897. The new century opened with widespread general prosperity for agriculture, accompanied by its expansion and diversification. The first fifteen years of the twentieth century were marked by a rapid influx of students into the agricultural colleges. Many of the institutions underwent phenomenal growth in facilities and departments of instruction, and in specialization of teaching and research. Post-graduate study became a necessity for the prospective agricultural teachers and scientists, and a few strong graduate centers emerged.

A further expansion of facilities and fields of work, which followed the World War, is still actively in progress.

The agricultural colleges early sought to aid farmers in their immediate problems by means of addresses before agricultural associations, at fairs and on other occasions, and by contributions to the agricultural journals. About 1870 meetings called Farmers Institutes, at which members of the college staffs offered popular instruction in agriculture, were held first in Kansas and Massachusetts, then in other states. The movement for organized extension teaching from the colleges got under way about 1892 and gradually became a recognized function. It was expanded to include itinerant lecturers, local short courses, movable schools, correspondence and reading courses, publication of bulletins on practical and scientific matters of interest to farmers, field experiments and demonstrations, and fair exhibits. As the demand for this work grew, a movement developed to obtain federal aid for the extension services. These efforts culminated in the passage by Congress of the Smith-Lever Act (1914). Under the stimulus of this act, which required practically equal funds to be provided by the several states, the benefits of the agricultural colleges and experiment stations have been brought to the farms and rural homes throughout the nation, with marked results in improving agricultural practise on the technological and business sides and in the elevation of country life. The extension service field force is by now a highly developed and efficient organization. It comprises specialists in the several major branches of agriculture and resident agents in the counties, known as county agricultural agents, home demonstration agents or boys' and girls' club agents.

Before the passage of the Morrill Act of 1862, the lower, practical schools of agriculture had largely disappeared. For a time the agricultural colleges offered a considerable amount of instruction of secondary grade in order to attract farm boys. The close of the nineteenth century saw the beginnings of a new movement to encourage the teaching of nature study, elementary agriculture and school gardening in the elementary schools. By 1915 the teaching of agriculture in public rural elementary schools was required in twenty-two states, and was actually offered in some schools in practically all of the states. This work is still in process of development and adaptation to the educational

and prevocational needs of country children.

As the colleges matured and raised their standards they gradually discontinued their instruction of secondary grade or relegated it to brief winter courses. Furthermore it became evident in America, as it had long been evident in Europe, that only a relatively small proportion of farm children would find it practicable to attend the agricultural colleges, and that the latter were destined to become primarily centers for the training of leaders—teachers, investigators and experts—and that provision for secondary instruction should be made independently, either in special agricultural schools or in the established high schools. Between 1880 and 1915 a number of special schools of agriculture were opened which flourished for a time. Out of a wide variety of experience and educational experiment finally emerged the nation wide system of public high school vocational departments of agriculture. The most rapid development of such departments followed the passage by Congress of the Smith-Hughes Vocational Education Act in 1917, under which large grants of federal funds came to the states for the establishment and maintenance of vocational agricultural education as a permanent part of the public high school system of the United States, and for the training of teachers for these vocational departments. Within the following five years every state had both provided facilities for the training of teachers and instituted courses of one to four years in length in a great many of the rural and village high schools.

The American structure for elementary and advanced agricultural education is now complete in its main outlines. The future will be concerned with a better adaptation of these institutions to their function in the educational system, with improvement in the professional preparation of teachers and in the methods of instruction, and with the discovery and formulation of a scientifically sounder body of knowledge for utilization at the several levels of instruction.

A. R. MANN

See: AGRICULTURAL SOCIETIES; AGRICULTURAL FAIRS; AGRICULTURAL EXPERIMENT STATIONS; COUNTY AGENT; EXTENSION WORK; FOLK SCHOOLS; VOCATIONAL EDUCATION; FARM MANAGEMENT; RURAL SOCIETY.

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AGRICULTURAL EXPERIMENT STATIONS are institutions for research in agriculture, each with a trained personnel headed by a director or other administrator, provided with reasonably permanent financial support, and equipped with buildings, experimental fields, livestock, laboratories and other necessary equipment. Discoveries in the natural sciences promoted agricultural research by stimulating inquiry into the relation of science to agriculture. Research stations were preceded by individual experimentation, especially of wealthy and public spirited "country gentlemen," but the superiority of properly constituted institutions over individual effort soon became apparent. Notwithstanding a growing recognition of the public importance of agricultural research, experiment stations, especially in Europe, for many years received their principal or entire support from private sources.

The Rothamsted station, established in 1837, is the most noted of the great centers of agricultural research in Great Britain. The Royal Agricultural Society, established in 1838, "proclaimed the alliance between practical farmers and men both of capital and of science," and became a potent factor in promoting scientific

agriculture. Recent outstanding developments in British agricultural research are the increase in its support by the imperial government and the extension and coordination of research throughout the empire. The Development Fund, instituted in 1909 and augmented in 1921, is the chief source of government subsidy, and additional aid is granted through the Empire Marketing Board appointed in 1926 on the recommendation of the Imperial Economic Conference in recognition of a unity of interest in the progress of agriculture.

The Australian Council for Scientific and Industrial Research, created in 1925, provides for cooperation in agricultural research in the state departments of agriculture and in the universities. In New Zealand research is conducted on experiment farms, in the colleges and universities, and in the privately endowed Cawthron Institute. The Veterinary Research Station at Onderstepoort, South Africa, conducts a broad program of investigation. Guelph College, now affiliated with the University of Toronto, was for several years the only Canadian agricultural experiment station. The first plan for coordinated effort in Canada, formulated in 1884, was called the Dominion Experimental Farm System and consisted of a central station near Ottawa and branches in the various provinces. Agricultural research in India is conducted mainly in the provincial departments of agriculture organized in 1906 and in the Imperial Agricultural Research Station at Pusa. Research in tropical and subtropical agriculture is receiving increased attention in India and in the colonies and dependencies. The Imperial College of Agriculture at Trinidad was opened in 1922, and the Amain Institute in Tanganyika, East Africa, organized by the Germans, is being restored. These institutions are parts of a plan, evolved at the First Imperial Agricultural Research Conference held in London in 1927, for a chain of tropical and subtropical experiment stations.

In continental Europe also, recent public policy in agricultural research is marked by expansion, coordination, centralization and increased support. Much of the early stimulus to agricultural research came from Germany through von Liebig and other scientists and through experiment stations, the first of which was founded in 1852. Experiment stations have been established for a long time in France and were reorganized in 1921 into a more centralized system under the Institute of Agricultural

Research subordinate to the Ministry of Agriculture. In fact the growth of experiment stations as agencies for agricultural improvement is universal.

Agricultural experimentation in America, as in Europe, was begun by individual effort and stimulated by agricultural societies and men of public spirit. President Washington, in 1796, recommended to Congress the establishment of a National Board of Agriculture. The New York Agricultural Society founded a chemical laboratory in 1849; and in 1856 the Maryland legislature established an agricultural college and provided for experimentation on the college farm. Research, including field experiments in many phases of agriculture, early became part of the regular work of the Federal Department of Agriculture, established in 1862.

The Land Grant Colleges, founded by the Morrill Act of 1862, experienced a growing need for reliable information, for residence teaching and for more helpful contact with farmers. Accordingly the establishment of agricultural experiment stations was recommended at a convention of representatives of these colleges called by the United States Commissioner of Agriculture in 1872. Before Congressional action was secured, several states established stations—Connecticut and California in 1875, North Carolina in 1877, New York in 1879 and New Jersey in 1880. By 1886 the Committee on Agriculture of the House of Representatives, reporting favorably the Hatch Bill, said that experiment stations had been organized in many state colleges and that "a very large number of the colleges established under the Act of 1862 are doing important work of precisely similar kind." The bill, adopted in 1887, granted \$15,000 to each state and territory for support of experiment stations "to conduct original researches or verify experiments . . . bearing directly on the agricultural industry of the United States . . . having due regard to the varying conditions and needs of the respective states and territories."

The national system of state experiment stations operates under the coordinating influence of the Office of Experiment Stations of the Federal Department of Agriculture, which also administers the nationally financed stations in Alaska, Guam, Hawaii, Porto Rico and Virgin Islands; serves as a clearing house of agricultural information for the United States and foreign countries; and issues publications reporting the status, progress and needs of

research. The principal publication, *Experiment Station Record*, has been published since 1889.

The Adams Act, passed by Congress in 1906, provided an additional \$15,000 for station work in each state. The Purnell Act of 1925 broadened the field of research to include agricultural economics, home economics and rural sociology, and further increased the federal support so that in 1929-30 the federal appropriations for the experiment stations in each state aggregated \$90,000. Federal support and cooperation have afforded a guiding influence in agricultural research, without curtailing the necessary freedom for independent endeavor. It is indicative of state and local interest that revenues of the experiment stations have increased more rapidly from sources within the states, such as state appropriations, station revenues from the sale of products, fees, contributions by individuals and local communities, etc., than from federal appropriations.

Testimony to the value of experiment stations is found in the rapid increase in public funds for their support in many countries, despite the demand for retrenchment in public expenditures since the World War. That conflict, and the agricultural depression which followed it, emphasized the dependence of agriculture on technological and economic information. A more fundamental cause of the advancement of agricultural research may be found in a growing faith of the masses in the power of science to solve their problems, and in the well founded belief that this research benefits not only the rural but quite as much the rapidly growing urban population to whom improvement in agriculture offers the best assurance of an adequate supply of food in the face of a diminishing supply of virgin agricultural land.

ERIC ENGLUND

See: AGRICULTURAL SOCIETIES; AGRICULTURAL FAIRS; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL EDUCATION; COUNTY AGENT.

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AGRICULTURAL FAIRS. The agricultural fair is a rural institution which is found in virtually all countries of the western world. It is not a market but an exhibition having for its chief aims the improvement of agriculture and the provision of a wholesome form of amusement for the rural people. In the United States and Canada it is known as the agricultural fair, while in Europe, Australia and in some other portions of the New World, it is known as the agricultural show.

The history of the agricultural show in England dates back to the last quarter of the eighteenth century, when agricultural clubs and societies were first organized. These clubs had for their object the improvement of agriculture, and the show was one of the chief means of achieving this end. The establishment of these clubs and the holding of shows were only a part of a larger agricultural awakening which was under way at the same time that the industrial revolution was in progress. The making of hay through the use of clover and other improved grasses came to be common at this time, and scientific breeding resulted in the development of much larger and better sheep and cattle. Arthur Young and gentlemen farmers wrote on agricultural subjects and added zest to the organization movement which culminated in the establishment of the Board of Agriculture in 1793. Among the earliest agricultural shows in England were the Lancashire Society Show held in 1761, and the Bath and West of England Show held in 1777. These were followed by many other local shows and plowing matches. The first national show was held by the Board of Agriculture in 1821.

The practise of holding local and national shows in England has continued to the present time and is also in vogue on the continent. Some of the more important shows in other European countries, are: the Concours Général Agricole de Paris, the East Prussian Agricultural Exhibition, the National Show organized by the General Association of Breeders in

Spain, and the International Exhibition of the Cheese Industry and Trade of Italy.

The history of the development of the agricultural fair in the United States is similar to that of England, but the movement came about a quarter of a century later and was not well under way until 1819. Agricultural clubs and societies were organized as early as 1785, and suggestions were made that these societies organize fairs and offer premiums for the best exhibits.

Considerable interest in agricultural organization centered in Washington, D. C., and it was there that the first fairs in the United States were held. A series of three fairs was begun in 1804. These probably grew out of a suggestion made by the first United States Commissioner of Patents that market days be established for the sale of cattle and local products. The exhibit, however, must have been the chief feature of these events, inasmuch as the city government and private citizens contributed funds for the payment of premiums. After a lapse of a few years the Columbian Agricultural Society began in 1810 to hold a series of five fairs at which sales were also featured. Auction facilities were provided at the close of the fair for the sale of cattle and various articles. This procedure, it was thought, contributed to the success of the fair.

The fact that these Washington fairs combined exhibits with markets might furnish a basis for the inference that the agricultural fair sprang from the old mediaeval fair or market. History, however, seems to show that this is not the case. In England the agricultural fair was conceived and first fostered by agricultural clubs, and in America it was likewise first suggested by clubs. The real beginning of fairs in the United States is found in the activities of the Berkshire Agricultural Society organized under the leadership of Elkanah Watson at Pittsfield, Massachusetts, in 1810. This society became the first permanent fair association in America. In 1819 the legislature of the state of New York appropriated \$20,000 for two years to be divided among its county fairs. After a few years the states generally adopted the policy of subsidizing fairs.

The period running from 1850 to 1870 has been designated too absolutely as the "golden age of the agricultural fair" in the United States. Since the seventies the institution has experienced a phenomenal growth in the number and kinds of fairs held, in the attendance,

in the value of premiums offered and in the value of buildings and grounds owned by fair associations. Rubinow states that "fairs and expositions have multiplied so rapidly that it is not feasible to try to chronicle the actual number in the United States. More than 3,000 fairs, including state, district, county, community, township, school and street types, are held every year at various seasons." E. L. Richardson, President of the International Association of Fairs and Expositions, which embraces in its membership fair associations of the United States and Canada, states that 39,468,550 people were in attendance at all fairs held in the two countries in 1927. The average value of buildings and grounds of members of the International Association is placed at \$1,078,539.

State and county fairs are generally conducted by corporations known as fair associations or agricultural societies. They are usually incorporated and as a rule receive state aid. Inasmuch as cooperation is an important aspect of a fair, it has been urged that voting be restricted to one vote per member, irrespective of the number of shares held. The community fair is usually fostered and managed by some rural organization. Where no organization of any kind exists, merely a loose association is effected for the purpose. The conduct of the state and county fairs is made amenable to the state authorities through the auditing of books of record and through the inspection of exhibitions by duly authorized agents. State fairs usually employ a permanent secretary, while county associations can get along with one serving only part of the year. This officer, who may also be the treasurer, is the life and spirit of the organization. He must know agricultural life and be familiar with social organization. He is usually assisted by a number of committees as follows: premium, finance, program, grounds, reception, school, entertainment, contest, young people's exhibits, concessions, entries and exhibits, and memberships. The most successful fairs cooperate with all public and private agricultural organizations. The support of the state department of agriculture, the college of agriculture, the experiment station, and the extension service with all its local organization, as well as cooperative societies and all private agricultural societies, is solicited by the successful fair secretary. Team work or cooperation is in fact the essence of success in fairs. The exhibits having the greatest educational value are frequently those which are prepared by depart-

ments of agriculture and colleges of agriculture.

The financing of the fair is often a problem. State appropriations, gate receipts and private subscriptions are sometimes insufficient to meet all expenses. Concessions for amusements are therefore generally regarded as necessary, and these concessions, it is complained, are not always of a desirable sort. To be eligible for state funds for maintenance, fair associations in Ohio must bar games of chance, doll racks and other similar concessions, and it has been demonstrated that successful fairs can be conducted without them. Horse racing is often a popular feature in the United States, and pony races and horse jumping are organized in England.

The chief functions of the agricultural fair are the education of the public and the furnishing of wholesome amusement. Exhibits and demonstrations can be presented so as to attract the crowd and drive home important principles of applied agriculture. Demonstrations are concerned not only with the production of better crops and livestock but with the preparation of these goods for the market. Lectures on various agricultural topics are desirable if they are of a popular kind. The crowd is in a playful mood and is looking for entertainment as well as instruction. The occasion of the agricultural fair is in fact a show day, a gala day, and a time when a friendly spirit of rivalry prevails.

EDWARD WIEST

See: FAIRS; AGRICULTURAL SOCIETIES; AGRICULTURAL EDUCATION; RURAL SOCIETY; AGRICULTURE, GOVERNMENT SERVICES FOR; COUNTY AGENT; AGRICULTURAL EXPERIMENT STATIONS.

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AGRICULTURAL HOLDINGS ACTS. See ALLOTMENTS; SMALL HOLDINGS.

AGRICULTURAL INSURANCE. The term, as commonly used, embraces all forms of insurance needed by farmers or agriculturists. In a narrower sense it refers particularly to such forms as crop and livestock insurance, which apply largely or exclusively to farm risks.

Hail insurance on growing crops, the only form of crop insurance generally available, is said to have originated in Germany in the latter part of the eighteenth century. It was introduced into the United States about 1880, and since 1910 has been written in considerable volume. During the season of 1919, which marked at least a temporary high point in such insurance, the hail premiums on American crops amounted to approximately \$30,000,000, and the insurance in force exceeded half a billion dollars.

In the United States, as well as in several other countries, hail insurance is written by three groups or classes of insurance agencies: first, joint-stock insurance companies which write various kinds of property insurance; second, mutual hail insurance companies; and third, state hail insurance funds or departments, which in this country are limited to North Dakota, South Dakota, Montana and Nebraska. In volume of hail insurance written, the joint-stock companies are approximately as important as the other two groups combined. The cost of hail insurance in the United States varies with different crops and localities and also with the agency employed, the rates ranging from about \$2.00 to \$15.00 per \$100 for the season, with a weighted average cost of about \$5.00 per hundred.

Insurance of crops against damage by frost has also been written in parts of Europe and elsewhere. In the United States such insurance has been limited largely to sugar cane in Louisiana and to citrus fruit in Florida and California.

Attempts to write so-called all-risk crop insurance for individual farmers, covering against substantially all important hazards beyond the control of the farmer, including losses due to price fluctuations, have hitherto proved discouraging. Since 1920, when a second major attempt to develop such insurance resulted in heavy losses, due in this case to a well-nigh unprecedented drop in agricultural prices, such insurance has been limited largely to protection covering loans or advances made to organized groups of fruit and truck growers in selected areas. All-risk crop insurance, covering at least a substantial part of the annual investment in crops, represents a real need on the

part of farmers. Particularly is this true in cases where considerable diversification is impracticable.

In many of the European countries a very large percentage of all horses, cattle and other livestock is insured. This insurance is carried mainly in mutual companies, although a number of joint-stock companies also are found in this field. The numerous local livestock insurance societies are usually in part reinsured in larger regional societies, and not infrequently they are subsidized by the state governments. Mutual livestock insurance in some form is said to have existed in Europe for seven hundred years or more.

In the United States most livestock insurance companies that have been organized either on the mutual or on the joint-stock plan have rapidly disappeared for lack of patronage. The few and relatively small mutual livestock companies, about twenty-five in number, that have survived for any considerable number of years are limited almost entirely to Pennsylvania and Ohio. Most of the livestock insurance in the United States carried on the joint-stock plan is now on the books of one relatively small company, although during the recent high price period which came to an end in 1920 there were nearly a score of such companies in operation.

That livestock insurance has remained so unimportant in the United States, as compared to its development in many of the older countries, is no doubt in part explained by the absence of numerous small farmers to whom the loss of a single animal is a serious disaster. To some extent the situation may be the result of an inclination on the part of American farmers to carry unduly heavy risks individually, rather than to pay the necessary cost of protection on a commercial basis or to cooperate with other farmers in a mutual livestock insurance company. In this form of insurance, even more than in others, successful operation on a mutual basis requires close supervision for the avoidance of needless losses and unjustifiable claims.

American farmers quite generally carry fire and windstorm insurance on their property. Most of the joint-stock fire insurance companies, as well as the larger general mutuals, insure some farm property against these hazards. In this field of insurance, however, American farmers, as well as those in Europe and elsewhere, have succeeded well in their mutual enterprises. There are nearly two thousand farmers' mutual fire insurance companies in the United States, with

a total membership of about 3,240,000 and total risks approximating ten billion dollars. This insurance is carried at an average annual cost of about twenty-six cents per hundred dollars, which is very materially below the average of commercial rates. About 13 percent of these farmers' mutual fire insurance companies write also insurance against windstorm.

There are, in addition, about sixty specialized mutual windstorm insurance companies in the United States that insure farm property either largely or exclusively. These companies carry total risks amounting to about two billion dollars. The cost of windstorm insurance on farm property varies for different parts of the country from about one fourth to one half the cost of fire insurance.

A number of mutual companies have recently been organized to insure American farmers against the hazards involved in the ownership and operation of automobiles. The largest of these mutuals now operates in a score of states, while another operates in four states. The others are more local in their operations. These mutuals have hitherto given protection at a substantial saving to their members as against the cost of automobile insurance on a commercial basis.

VICTOR N. VALGREN

See: INSURANCE; FIRE INSURANCE; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL COOPERATION.

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AGRICULTURAL LABOR. Since the pursuit of agriculture has from time immemorial made the greatest demands upon the activities of the

human race, both the type and conditions of the employment it gives rise to are economically and socially of extreme importance. Even nowadays four fifths of the demand for manufactured products emanates from tillers of the soil, and the bulk of the world's population is engaged in the manual processes of food raising. Among early civilizations slave labor played an important part and represented the main alternative to a system of occupation by small owners in times when hired labor was scarce. It was employed in Egypt, in Persia and in Babylon, and the Romans made such progressive use of slaves that during the later periods of the republic most rural workers were slaves, laboring under overseers, often for absentee masters. Designated as *soluti* (when free from personal restraint) or as *vinci* (when worked in fetters), these *servi* numbered within their ranks both general laborers and specialists. Records are available as to the cost of their maintenance, the nature of their dietary, and the numbers necessary to cultivate different types and areas of land; calculations based on this material show that, while the expense of maintaining a Roman slave must have been equivalent to the wage paid to a hired European worker of the late eighteenth century, his effective output fell below that of the latter. Pliny and other contemporary writers, indeed, commented upon the uneconomic nature of slave labor. Among the Greeks, although agriculture was generally regarded as the most honorable of all professions, it was nevertheless considered to be a suitable employment for slaves, who ultimately outnumbered other types of workers. In western Europe where the transition from village community to manor presents difficult problems in connection with the status of individuals, slavery existed until after the Norman conquest of England. Thus *Domesday Book* records 35,000 "freemen," and 25,000 slaves, as compared with 200,000 villeins and cottars who, if physically free, were economically attached to the soil. Thereafter slave labor, as opposed to peonage, was confined to the southern states and the West Indies, where its history is common knowledge.

Throughout Europe serfdom, as represented by the manor, was predominant for centuries, the various classes of tenants holding their arable strips and enjoying other rights in return for services (e.g. boon-work and week-work) rendered to the lord. This system, which called for the cooperative use of implements and

numerous combined acts of husbandry, was ill adapted to survive the introduction of a monetary system or the growth of population, so that even in the thirteenth century weekly wage earners began to appear. This factor, combined with the gradual substitution of money rents for personal services, permitted tenants to devote themselves to the cultivation of their own holdings. So important a movement, occupying centuries in development and assuming various shapes in different countries, was expedited by the onslaught of the Black Death, which placed those who survived it in a position to secure greater personal independence at the expense of less equality of status, and initiated competition in wages and in rents. Thereafter, while the executive rigorously suppressed uprisings, the English landowners adopted sheep farming as a means of reducing their labor expenditure. Despite the survival of a considerable amount of villein-tenure in the shape of copy-hold, the ownership of land fell progressively into the hands of those who by trade and commerce had secured the means to acquire it. Enclosure, whether for the extension of grassland farming in the fifteenth and sixteenth centuries, or as part of the reverse process entailed in the increased production of wheat at the end of the nineteenth, inflicted hardship on the lowest ranks of the agricultural community, for at each period tens of thousands of peasant occupiers and owners were either deprived of their holdings or otherwise unfavorably affected. Too much credence, however, must not be given to exaggerated statements that the "yeomanry" was, upon either occasion, wiped out. After the Napoleonic wars the condition of the English agricultural laborer, who in the meantime had participated in the changing fortunes of his industry, definitely deteriorated. Faced by unemployment and by the hardships attendant upon the prevailing system of poor-relief, he once more attempted to exercise force, upon occasion destroying the newly invented machinery which he believed to be responsible for his economic disabilities, just as his forbears had treated manorial records. The industrial revolution simultaneously deprived his wife and family of earnings gained in cottage industry. The Poor Law system, which had alternated between excessive severity and the indiscriminate charity associated with "Gilbert's Act" and "Speenhamland," was drastically altered to meet the new conditions.

Subsequently "outdoor relief" was generally refused to the able bodied, the burden of local taxation (a disproportionate amount of which fell upon rural areas) was lightened, and farmers were enabled to meet with more confidence the demand for an augmented home supply of foodstuffs. The hereditarily landless laborer, despite such electoral concessions as the Reform Acts, was definitely confirmed in the situation toward which he had drifted after the fifteenth century. The period of high farming that followed saw him, despite the repeal of the Corn Laws, numerically at his greatest strength and enjoying an alleged "Golden Age." His social circumstances were still, however, untouched.

In other European countries serfdom survived the Middle Ages, being ultimately abolished by revolution, as in eighteenth century France, or by more constitutional means, as in nineteenth century Germany, in most cases peasant proprietary taking its place. In Russia, prior to the Great War, despite measures to establish them as tenants, those peasants who were not cultivating the open fields on mediæval lines were laboring on the estates of great landowners under conditions akin to servitude. While the universal post-war demand for freer access to the soil by those cultivating it resulted in the expropriation of millions of acres and their reallocation in small units, practical experience was unfortunately not always regarded as an essential qualification on the part of claimants; thus the urban populace too often secured preferential treatment and the transference did not afford a convincing demonstration of the value of widespread peasant ownership. Within a few years, however, modifications were effected in the land legislation of many European states, with the result that private ownership was in certain circumstances recognized in Soviet Russia, and elsewhere the area that an individual might hold was increased. In England, while the total of statutory small holdings (i.e. those below fifty acres) tended to remain stationary, the number specially created exceeded 20,000, provided at a very heavy cost. Here the main qualification was not experience but military service.

In the United States of America the early colonists introduced the systems of tenure and of cultivation with which they were familiar; but scarcity of labor, together with abundance of land, invariably raised difficulties, and to meet them, combined or forced labor were the

only alternatives. Two hundred years later, when railway construction and other works of development had withdrawn men by the hundred thousands from agriculture, the widespread adoption of machinery saved the situation in the face of rising costs and falling prices. In the southern states, notably Alabama and Georgia, peonage, either of criminals or colored labor, flourished until rendered progressively ineffective by legislative action.

In France, Denmark and such areas as are comprised in the southern and western portions of Germany the problem of the agricultural laborer assumes a different aspect, for peasant farmers utilize immigrant or seasonal helpers from neighboring states to work under conditions often the reverse of satisfactory. Small farm units, therefore, not only make excessive demands upon the time and strength of their owner and his family but may also give rise to extraneous abuses. On the other hand, in the United States and in Canada, the difficulties of assimilating a permanent influx of all the races of Europe and Asia has had to be faced, their divergent values as citizens and workers adding complications, of which not the least has been the tendency to form national group settlements.

In so far as the proportion of hired workers to farmers is concerned, the British Isles provide an extreme case, for employees outnumber employers by more than two to one. On the other hand in the United States less than half the total agricultural population is of the wage earning type. In most countries there has emerged, at some time or other, a system of voluntary "gang-labor." In the arable districts of England in the middle of the nineteenth century many thousands of persons, mainly women and children, were so employed under conditions which soon called for active intervention. In California Japanese, in Texas Mexican, workers have thus been utilized on a large scale. Such cases must be distinguished from the universal employment at certain seasons of extra hands which makes the enumeration and definition of agricultural workers so difficult and frequently gives a fallacious appearance to official statistics. Part time employment varies with the type of farming pursued, and in many instances (e.g. the presence of sugar beet or the proximity of forests) the establishment of grouped small holdings is facilitated by the opportunities thus afforded for winter, or off season work. Actual copart-

nership in agriculture has seldom met with success, for the relatively low profits—with a possibility of none—to be divided, combined with the slow turnover of capital, have formed an insufficient incentive to extra toil.

The agricultural worker, master perhaps of a dozen tasks, none of them simple and all calling for broad judgment as compared to that demanded of the urban machine minder, has earnings low in comparison with those of the industrialist, but not so meager as a casual inspection of cash payments alone would indicate. Thus the total emoluments of the rural employee may include such payments in kind as the provision of food and fuel; free occupation of plots of land; use of teams; additional money for specific work (e.g. harvest); piece work earnings; provision of a dwelling free or at an uneconomic rent; overtime remuneration. There must be added the earnings of wife and children, the labor of the latter being often regarded by employers as particularly valuable in keeping their land clean. Such are the factors which, in combination with the freer and healthier life of the countryside, generally maintain a sufficient supply of labor. That unemployment in agriculture is not a common feature is evidenced by the widespread disinclination to insure against it by both employers and employed.

The use of machinery, which in parts of the world has made possible the cultivation of as much as a square mile by one man, has naturally tended to reduce the number of workers; but in the Old World, where physical and economic conditions are peculiar, the manual work performed by cheap labor is displaced slowly. Thus in the arable districts of England it is usual to find four persons employed per hundred acres; while the grassland farmer utilizes about half that number of slightly better paid hands. The effect of the size of the holding on labor density is striking, for on English farms of from one to five acres the total number of workers (including members of the occupant's family) is 13.4 per hundred acres; on five to fifty acres it falls to 6.5; on fifty to three hundred acres to 3.3; and on over three hundred acres to 2.6. The higher proportions are of course universally found in suburban market gardening and fruit growing districts. In densely populated Holland and Belgium, as also among the teeming Chinese, where land is relatively scarce and therefore dear, the maximum output is desirable; in the western world this is

secured by peasant proprietorship, and in the East is secured also by the cheapness and abundance of human labor. In both cases a high return is secured from the soil, and output per acre is the criterion of successful farming. In the New World the greatest output per person employed is aimed at on land which is abundant and cheap. Thus it happens that the bulk of the foodstuffs imported into Europe in competition with the high-yielding soils of that continent comes from land giving perhaps half the returns obtained there; for although the laborer in the United States, Canada and Australia may be paid twice what he would earn in Europe, the cost of his labor per unit of produce is relatively small, so great is the economy of large single-producing units. It is, indeed, generally found that, as the size of holding increases, the value of the output per person employed moves upward. In English arable farming the proportion of the total expenditure attributable to labor ranges from 20 percent up to nearly 50 percent, averaging some 30 percent. The most promising remedy against increasing labor costs would appear to be an extended use of mechanical aids and a close study of the psychology of the worker. In the latter connection it can be shown that reduction in hours of labor within limits does not adversely affect output.

The agrarian policy, so widely pursued during the decade after the war, inevitably touched the hired land-worker, whose economic position was thereby improved. In England the provision of wages boards was effective in raising cash wages by some 20 percent, and in real wages the English worker is, together with the Dane, the highest paid agriculturist in Europe. Although it is difficult to compare conditions on the western side of the Atlantic, it may be pointed out that wage payments have in general conformed to fluctuations in the cost of living and that nothing but the depression through which agriculture passed prevented the rural worker from securing those higher real wages that fell to the general laborer. In 1926 American farm wages averaged 71 percent above the pre-war parity as against a cost-of-living increase of 72; industrial wages ranged from 100 to 150. In England, with a cost-of-living index augmented by 66 to 68 percent, agricultural wages in 1926 stood at 76 percent, and those of general laborers about 100 percent, above the normal.

In one respect the agricultural worker falls behind his industrial brother, for the trade

union movement, starting in England in the first half of the nineteenth century and taken up largely by the industrial trades of that and other countries, is still mainly confined to the industrial trades. Despite the work of enthusiastic philanthropists and political organizers, the rural worker remained aloof. In England, for example, rarely more than a tithe of the possible membership has at any time been secured, the actual numbers fluctuating with political and social conditions. The reasons are obvious: an industry composed of scattered and often inaccessible units; the close personal relationship engendered between master and man; the small financial resources of the workers, to whom a subscription of even a few cents a week implies sacrifice; the conservative habits of mind of those associated with the land; the futility of the strike as a lever in face of the slow processes of nature and the abundance of alternative forms of labor. Thus every attempt at direct action in agriculture has been foredoomed to failure, and those responsible for the direction of union policy have wisely devoted their energies to campaigns for social betterment.

In almost every country of the world the amenities of the rural worker's life have steadily increased. Since the middle of the nineteenth century, housing, education, the hours and conditions of labor, and emigration have received growing attention, and accordingly the disparity between the standards of the town and those of the country is being reduced. Work has been made more congenial and its hours curtailed. The growth of invention, represented by the automobile, the wireless, the telephone and the bicycle, enables the countryman to participate in the advantages of urban life, and may check the widespread movement townwards, which everywhere, from the mid-nineteenth century on, has been a familiar feature. It may be claimed that in civilized countries the hired land worker enjoys as good an expectation of life as does his town cousin; indeed his better physique secures his preferential selection in such callings as the army and the police force. He is often housed as well as his employer. There are few states which do not encourage, by means of special schools, technical colleges or provision for scholarships, his education and that of his family. In most countries, again, his feet are set upon the first or second rungs of the agricultural ladder, since he is generally accorded

preference when seeking a state-provided holding. Once so established, special provision is always made for supplying him with credit, machinery and an outlet for his produce; in certain cases group settlements give the practical training which he may need. Further ascent of the ladder is then a matter for himself alone. Workers in all countries and in all ages have climbed to the top; but it must not be forgotten that success in agriculture, as in other walks of life, depends upon ability, character and determination, not merely upon technical skill fostered from outside sources.

J. A. VENN

See: AGRICULTURE; AGRICULTURAL MACHINERY; AGRARIAN MOVEMENTS; AGRARIAN SYNDICALISM; MIGRATORY LABOR; PEASANTRY; FARM TENANCY; SMALL HOLDINGS; ALLOTMENTS; AGRICULTURE, GOVERNMENT SERVICES FOR; POOR LAWS; WAGES; TRADE UNIONS; LABOR MOVEMENT; SOCIAL INSURANCE; RURAL SOCIETY; SLAVERY; SERFDOM; PEONAGE; FORCED LABOR.

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AGRICULTURAL MACHINERY. Implements operated by animal power have been employed in agriculture since prehistoric times. Oxen and horses were used in plowing, harrowing and in turning revolving pumps and mills. In the eighteenth century important improvements were made in the implements used in cultivation. This period witnessed the introduction of Jethro Tull's horse drill, horse hoes, horse rakes, Meikle's threshing machine, Eli Whitney's cotton gin, crude machinery for crushing sugar

cane, and plants for boiling sugar and preparing indigo. Yet the general application of mechanical contrivances in tilling the soil, planting seed and garnering the crop did not come until the second quarter of the nineteenth century.

Since then the steel plow has come into general use not only in the new countries, where lack of man power placed a premium on superior implements, but also in older, more settled agriculture. Numerous adaptations have been made for special purposes such as hillside plowing and the plowing of different varieties of soils. Sulky plows, disc plows and two-bottom (gang) plows pulled by four to six horses have been widely adopted. Plows with many bottoms have been developed for use with tractors. Much progress has been made in the development of various types of harrows, pulverizers, land packers, combinations of the harrow with seeders and planters, and two to four-row cultivators. Sowing and planting have been facilitated by the invention of grain drills, automatic corn planters, cotton and potato planters and special machinery for spreading fertilizers.

During the first three decades of the nineteenth century there were many attempts to invent a horse drawn reaper, but no practicable implement was achieved until the appearance of Hussey's and McCormick's reapers. By easy steps the reaper was perfected through the addition of a self-rake, a platform for the binders and finally an automatic binder using at first wire and then twine. An adaptation of the grain binder is the corn binder, and machines for harvesting soy beans, sweet clover and grain sorghums. Flax harvesting has been facilitated by the recent invention of the flax puller. Cotton picking machines appear to be the next addition to the series of mechanical harvesters.

Threshing machines run by horse power, steam or gasoline have gradually replaced the flail and hand winnowing devices. Threshing machines have also been developed for grass seed, soy beans and peas. A most important recent development is the grain combine, which unites the processes of harvesting and threshing. At first this machine could be used only in fields where the grain ripened uniformly, as in the semi-arid dry farming areas. In recent years it has come to be fairly common to cut the grain and throw it into windrows for drying, the combine following later, picking up the windrows and threshing out the grain. A combine adapted to corn harvesting, husking and shelling is said to be in process of development.

The old laborious processes of hay making have largely been eliminated by mowers, horse rakes, tedders, stackers and loaders; and hay drying equipment has been invented to reduce risks of loss from rain. Handling and utilization of forage crops have been greatly advanced by silage cutters and blowers, huskers and shredders.

Dairying has been transformed by separators, testers, milking machines, automatic pasteurizers and bottlers, automatic churns, butter workers and by mechanical arrangements for providing water pressure and for handling feed and manure.

Automatic spraying machines have greatly facilitated the care of fruit. Special machinery for dusting cotton and for handling corn forage has been developed to meet emergencies created by the boll weevil and the corn borer. Other miscellaneous improvements include potato digging machines, ditching machines and automatic pumps.

Agricultural production and farm life have been profoundly affected by the automobile and the motor truck. The last two decades have witnessed the adaptation of the gas tractor to almost all kinds of field work and the expansion of uses of stationary engines. Recently there has been a rapid extension of electric power into the countryside and many progressive farm homes have been motorized.

In spite of great progress in the invention of farm machinery, a large part of the world still employs the primitive methods of antiquity. In most of Africa and Asia and parts of Europe mechanization of farming has been retarded by ignorance, inertia, lack of capital and extremely small size of holdings, although the latter difficulty is in some instances overcome by co-operative ownership of farm machinery or by systems of hire. Great Britain, with its comparatively large scale system of agriculture, has been in the forefront of European countries in mechanization of farming. In those parts of continental Europe where large scale farming predominates considerable progress in the adoption of farm machinery has occurred, but such progress was retarded by the breaking up of large estates following the World War. Low wage levels, which prevailed in some continental countries and in South America and South Africa, removed the incentive to the adoption of labor saving devices even where otherwise favorable conditions have obtained.

Canada, the United States and Australasia have held leadership in the adoption of farm

machinery and mechanical power. In 1921 the average value of machinery per farm in Canada was \$935. In the United States, mainly because of the large number of small farms in the South, the average value of implements and machinery per farm in 1925 was only \$423, but the aggregate value was more than two and a half billion dollars and, even allowing for changes in the purchasing power of money, about ten times the value in 1870. The increase in value of machinery in this period was five times the total months of man labor employed in farming. In 1921 tractors were reported by 6.1 percent of occupied farms of Canada, and in 1925 by 7.4 percent of farms in the United States, the latter figure having doubled in five years. Introduction of motor trucks and automobiles, largely for production uses, has been extremely rapid in both countries. In the United States total primary power on farms, other than man power, is estimated to have increased from 1.6 horse power per worker in 1870 to 4.1 in 1920. Of total power utilized in 1924 it is estimated that 61 percent was animal power, 16 percent from tractors, slightly less than 4 percent from motor trucks, 12.5 percent from stationary engines, slightly over 1 percent from windmills and 5.5 percent from electricity.

The agricultural machine, like the industrial, represents a new, more rational combination of the simple components of an operation originally performed by man. It makes possible therefore the employment of motive power and reduces the necessity for intelligent manipulation. In agriculture the adoption of the machine brought with it first an extended use of animal power and later of power generated by steam engines, internal combustion engines and electric motors. It also permits a more perfect execution of many operations or the performance of tasks originally beyond the reach of man because of quantitative or qualitative limitations of the human body. Efficient tillage machinery accomplishes more effective cultivation, resulting in a larger product per acre. Shredders and silage cutters have made possible more efficient utilization of feeds. Mechanical sprayers and dusters are more effective than hand implements in applying safeguards against insect and disease devastation. Pasteurizers and fruit sorters make possible products of higher quality. Hay dryers perform work left originally to the natural forces of the sun and the wind. Yet a most characteristic contribution of machinery to agricultural production still remains to be mentioned: it facilitates

the accomplishment of work in the short span of time when weather conditions are most favorable.

The most important effect of the introduction of farm machinery is economy of human labor. More than thirty years ago it was estimated that in the case of nine principal crops the aggregate saving of farm labor was 79 percent and the saving in cost, 46.3 percent. Very large economies have been made possible by developments since that date. For instance, combines operated by one or two men cut and thresh upward of thirty acres a day, and frequently at less than half the cost for corresponding operations when binders or headers are employed. Economy of farm labor in the United States due to the introduction of farm machines may be roughly measured by the fact that from 1870 to 1920 the acreage of improved land per farm worker increased about 50 percent. Product per worker nearly doubled during that period. Rough comparisons of productivity in the United States and various countries of western Europe indicate a product per man in the United States from two to six times as great. Further allowance, of course, should be made for labor and other costs involved in manufacture of machines.

Although adoption of labor saving devices in agriculture has been generally slower than in manufacturing, the process has been at times sufficiently rapid to result in an embarrassing displacement of labor. In the early thirties of the nineteenth century there were uprisings of farm laborers in the south of England directed against newly introduced threshing machines, and in the comparatively prosperous decade 1850 to 1860 there was considerable unrest in the same area due partly to adoption of machinery. Adoption of farm machinery in the most highly industrialized countries of western Europe was less destructive to the welfare of agricultural labor, by reason of the large outlet furnished by urban industry, than the less extensive adoption in countries of southern Europe where the industrial outlet was more restricted.

The serious agricultural depression in England which began about 1875 was largely the result of competition due to the combination of newly opened grain lands and newly adopted farm machinery in America. On the other hand the introduction of machinery and other improvements tended to mitigate the hardships of the more progressive British farmers. Since 1920 the rapid introduction of tractors, automobiles and other farm machines has aggravated and

prolonged agricultural depression by greatly reducing the demand for feed for horses and mules, while stimulating cultivation of large areas of level semi-arid lands in various countries.

Introduction of farm machinery has resulted in notable geographic shifts toward lands of relatively level topography, particularly to cheap lands of low rainfall in Canada, Australia, the Argentine Republic and the western part of the United States, which could not be economically cultivated under more laborious methods. This tendency has reacted unfavorably on many humid areas unfitted by topography for the extensive introduction of machinery. In the United States these geographic shifts, combined with the cityward movement and certain industrial shifts, have also resulted in important changes in the geographic distribution of political power.

Corresponding to the geographic shifts, profound changes are occurring in systems of farming and of farm organization in various regions. In areas of level topography there is a tendency toward greater mechanization, large scale operation, specialization in production and less dependence on imported casual labor; in areas less favorable to field machinery the tendency is toward development of labor saving methods for non-field operations, adoption of types of field machines better adapted to a rolling terrain, elimination of rougher lands from the farming areas and the development of an agriculture favored by nearness to market.

The whole process of agricultural mechanization combined with the progress of transportation and urbanization has been an important influence in substituting world markets for local markets, and commercial and capitalistic agriculture for self-sufficing farming. Many observers compare the process of agricultural industrialization to the industrial revolution and believe that it will result in the displacement of the domestic system in farming by large capitalistic operating units. Such changes would inevitably involve a profound transformation in the characteristics and status of the agricultural personnel and an equally significant modification of rural social structure.

LEWIS CECIL GRAY

See: AGRICULTURE, GENERAL PROBLEMS; AGRICULTURAL EDUCATION; AGRICULTURAL EXPERIMENT STATIONS; AGRICULTURAL LABOR; AGRICULTURAL COOPERATION; SMALL HOLDINGS; AGRICULTURAL CREDIT; AGRICULTURE, GOVERNMENT SERVICES FOR.

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der Maschinen in der Landwirtschaft, Staats- und sozialwissenschaftliche Forschungen, vol. xx, no. 5 (Leipsic 1902); Quaintance, H. W., *The Influence of Farm Machinery on Production and Labor*, American Economic Association Publications, 3rd series, vol. v, no. 4 (New York 1904); Erdman, H. E., "Who Gets the Benefit of Improvements in Agriculture?" in *Journal of Farm Economics*, vol. xi (1929) 24-45; Holmes, George K., and Rumeley, E. A., excerpts in *Readings in the Economic History of American Agriculture*, ed. by L. B. Schmidt and E. D. Ross (New York 1925) p. 356-69; Tolley, H. R., "The Role of Machinery in American Agriculture," Prague International Management Congress Publications in English, no. xiii (Prague 1925); Kinsman, D. C., *An Appraisal of Power Used on Farms in the United States*, U. S. Department of Agriculture, Department Bulletin 1348 (Washington 1925).

AGRICULTURAL MACHINERY INDUSTRY. Agricultural implements represent a group of commodities used on the farm and not a group of products manufactured by a single branch of industry. The term "agricultural implements industry," as employed by the United States Census Bureau, excludes enterprises manufacturing farm tractors, vehicles and barn equipment, as well as establishments a minor share of whose output consists of agricultural implements. While in 1927 over 460 million dollars' worth of farm equipment was manufactured in the United States, the value of the total output of the agricultural implements industry did not exceed 203 million dollars. However, in terms of a broader classification, the manufacture of agricultural implements and machines may be considered as a specialized branch of foundry and machine shop work.

As a hand trade the forging of plow irons, sickles, scythes, axes and similar tools is an industry which antedated by centuries the industrial revolution. It was the business of the village blacksmith to make and repair these implements for his neighbors. The improved technique of iron working and the wider markets created by transportation developments resulted in the appearance of small establishments specializing in the production of tools for the agriculturist. This specialization eventually led to improvements in design and to the better adaptation of the implements to the needs of differing localities. Village mechanics or non-specialized manufacturers could not successfully compete with these plants which thus formed the nuclei of a new, growing branch of industry. Plow making was perhaps the first to acquire a separate identity; in the United States it was recognized as a distinct industry even

before 1830. In Pittsburgh, which shortly became the leading center, a factory using steam power manufactured a hundred plows a day as early as 1838. By 1843 Massachusetts boasted of 73 plow makers with an annual output of 60,000 units. The industry was not merely expanding; its technical processes were increasingly mechanized and the individual factories were growing in size. By 1855 John Deere at Moline, Illinois, reached an annual output of over 13,000 steel plows. A similar specialization and improvement could be observed in the manufacture of cradle scythes, shovels and other light implements. In the South several factories were engaged in the exclusive manufacture of Whitney's cotton gins.

A more important stimulus to the development of a factory industry organized on a large scale and producing interchangeable parts came from the invention and rapid adoption of harvesting machinery. Until the late thirties the improvement of agricultural implements was directed at raising the quality of cultivation; after this period the inventions were principally in the nature of labor saving devices. Although 33 English, 2 continental and 22 American inventions of reapers were recorded before 1831, conditions had not yet reached the point where they might be utilized; it was not until the rapid settlement of the western prairies brought about an extreme shortage of labor that a market was created for machines of demonstrated practicability.

Under these exceptionally favorable circumstances a large scale manufacture of harvesting machines grew overnight. McCormick's reaper was not of great practical value until 1845. After trying Cincinnati and Brockport (New York) and finding them unsatisfactory as to location, he established his plant in Chicago in 1847. By 1849 he had 19 local agencies and in 1851 his sales reached the thousand mark. In the following decade six important concerns were organized and by 1879 there were about a hundred relatively large manufacturers of harvesting machines. In the meantime important inventions were crowding the field: the self-rake in 1852, the Marsh harvester in 1857, the wire self-binder in 1874 and the twine self-binder in 1879. With the exception of the last, these inventions superseded neither the original reaper nor one another, but constituted a series of accretions enabling one machine to perform an increasing number of operations. Patent arrangements permitting, it was easy to graft them one upon

another and offer the farmer an increasingly self-sufficient machine. This allowed the expansion of existing plants and the establishment of new plants to feed the enormous demand and did not call for the elimination of those enterprises whose product was becoming obsolete. That is not to say that there were no struggles among manufacturers: patent lawsuits were frequent and protracted, machines of different makes were subjected to competitive field tests to the delight and edification of rural audiences, and competition extended to terms of sale and to the securing of the best local agents by exclusive contracts.

The period of agricultural depression, which lasted from the late seventies until 1896, coupled with the retardation in the occupation of free land, meant a slowing down in the rate of growth of this industry. Also, the perfected harvesting machine had become by this time a complicated contrivance, the manufacture of which was costly and could be carried out efficiently only on a large scale. A terrific jolt to the industry was given by Deering in 1879, when he transferred his plant to Chicago and began manufacturing the twine self-binder. In the struggle which ensued between the twine and the wire self-binders, the number of important manufacturers was reduced from about one hundred to twenty-two. In the following two decades competition was severe: it developed into a real trade war between McCormick and Deering, the two largest producers. Although steel was being used to a much larger extent than before, and minor improvements were being continually made, the sale price of machines was rapidly declining. By the turn of the century the number of firms was reduced to fourteen. In 1902, with the aid of the Morgan interests, five of the largest manufacturers merged to form the International Harvester Company. After purchasing during the next year three more enterprises, the harvester combination found itself in virtually monopolistic control of the harvesting machine field.

In the subsequent period the International Harvester Company proceeded to use its strong position and its abundant supply of liquid funds to acquire control of essential raw materials, to increase its foreign sales, but above all to expand its activities in the manufacture of other lines of farm equipment. The marketing of the product always constituted an important business phase of this industry. The farmers had to be familiarized with the operation of the

"new-fangled" devices; as the machines grew more complicated and expensive it became increasingly necessary for the manufacturers to finance the purchasers; efficient services for the replacement of parts had to be maintained. The pioneers in the industry were forced to build up an entirely new distribution system; neither local mechanics nor general merchants could be relied upon to understand the intricacies of the new machines nor to furnish credit to the farmers. Local agents had to be introduced from the outside and their work supplemented with sales talks and mechanical demonstrations by men directed from the center. In the trade war which developed, agents were tied down by exclusive contracts prohibiting them from dealing in competing machines of other manufacturers; moreover each company attempted to attach to itself as many of such local representatives as possible, thus effectively limiting the retail outlets of other companies. Because credit to retail purchasers was furnished by manufacturers and because competition was severe, the retail sale price of harvesting machines was virtually fixed by their makers. Under these conditions the manufacturers not only owned their production plants but also controlled the large distribution apparatus. The product and its manufacture having been perfected and the sale of harvesting machinery virtually monopolized, costs could be reduced and operations expanded only through the employment of the existing machinery for the sale of an increasing variety of farm equipment.

The acquisition of "new lines" by the harvester combination put the producers in those branches of the industry on the defensive. Among them the consolidation movement had a checkered history. The price cutting of the period 1880-1896 had affected them as well; but combination had not been feasible because of the smaller size and greater numbers. A most important obstacle to agreement in each line was the manufacture of a great variety of implement types scarcely comparable as to quality or cost of production. In spite of this some important consolidations were attempted and achieved. In 1893 the spring tooth harrow combination represented a merger of 21 companies controlling 85 percent of the total output. In the early 1900's an abortive attempt was made to combine the wagon manufacturers. At the same time a plow combine nearly reached completion before it was wrecked by the objections of one or two leading manufacturers. In 1903 a company was organized which controlled half of the national

production of grain drills. In other lines attempts to mitigate the severity of competition led to formation of trade associations which endeavored to induce manufacturers to study their production costs, reduce the variety in similar types of implement produced and to establish a standard costing procedure and thus to formulate indirectly a set of standard minimum prices. The activities of the harvester combination furnished a new incentive to the formation of consolidations in order to take on an increasing number of lines.

Under the circumstances the manufacturers of plows were best able to take effective action. In this branch of industry there were a number of big concerns whose products were in demand during a large part of the year and which had therefore found it advantageous to develop and control a separate marketing organization. They soon found that this organization could also be used for the distribution of an increasingly varied line of implements manufactured by other non-competing concerns. The conditions were thus ripe for taking the next step and controlling the manufacture as well as the distribution of other types of farm implements. This tendency to abandon specialized manufacture, caused as it was by the pressure from the marketing end, has continued to date, two mergers of the same type having occurred during the last year. In the meantime the consent decree entered against the harvester combination in 1918, by which it was ordered to sell three of its five lines of harvesting machines and not to employ more than one agent or representative in any one town, has made the business organization of the industry somewhat more homogeneous. It increasingly tends to consist of a number of large, full line houses with a greater number of smaller specialized manufacturers compelled to cooperate with manufacturers of other non-competing lines in marketing their output.

The past quarter century has witnessed an important addition to sources of motive power on the farm. Even before 1900 stationary internal combustion engines were employed in agriculture, largely in connection with threshing. On the very large farms steam power was used for pulling plows, the energy at first being transmitted to the plow through a system of cables and later by attaching the steam engine to the plow. From these unpromising beginnings the early tractors were developed in the 1900's. Although lighter than the steam engine they were still very heavy, called for the use of

extremely large agricultural implements and were practicable only where cultivation of the soil was conducted on a large scale. By 1910, however, internal combustion engineers devised smaller, lighter tractors, and in 1914, 3000 units of this type were sold by American manufacturers. The war further encouraged the manufacture of tractors. The diversion of man power to war uses, coupled with the need for increased agricultural production, stimulated further mechanization of farm operations. The equipment used in manufacturing war munitions proved easily adaptable to the production of tractors, so that with the termination of the war a large amount of equipment became available. The post-war period brought a further improvement in tractor design: by 1925 general purpose small tractors had become both practicable and popular. Since tractors have several other important uses, their manufacture is not generally considered a part of the agricultural machinery industry; because of the nature of the product as well as of the manufacturing processes involved it is more nearly a branch of the automobile industry. However, it interlocks with the agricultural machinery industry at more points than one: large manufacturers of agricultural equipment, in conformity with the tendency to carry a full line, produce tractors just as they previously manufactured stationary internal combustion engines and still continue to manufacture horse drawn wagons; tractor manufacturers tend to expand into the production of plows; finally the use of the tractor is influencing, and is bound to influence in the future, the design of agricultural implements in connection with which the tractor is employed.

The United States is by far the largest producer of agricultural equipment. Because of its possession of the essential raw materials and technical skill and because of the existence of a rapidly expanding domestic market, the industry soon developed to the point where it was exporting its products to foreign markets. The most important of these were the countries of the New World in which agriculture conducted on a large scale was rapidly preempting hitherto virgin land, but which were not sufficiently advanced industrially to make feasible a domestic manufacture of the heavier and costlier agricultural machines. Argentina, Canada, Russia, France, Australasia and British South Africa together absorbed very nearly the entire American exports. The characteristically American export product is the harvesting machine; since

the war farm tractors have also been exported on a large scale. The International Harvester Company expanded its foreign business to a point which called for the organization of an extensive chain of foreign branch houses and the establishment of plants in Germany, Russia, Sweden, France and Canada. Smaller companies took care of their exports by establishing permanent connections with foreign jobbers.

The table below represents a statistical summary, based on census and Department of Commerce data, of the historical development of the industry in the United States.

In addition to the United States the industry has also reached an impressive magnitude in the United Kingdom and Germany. The early development of the iron and steel industry and of the engineering trades, as well as her dominant position in world commerce, fitted England to become an important producer of agricultural machinery; the relative insignificance of English agriculture and the virtual monopolization by America of the production of harvesting machines were of course negative factors. England began early to manufacture improved plows on a considerable scale and developed a large export

YEARS	AGRICULTURAL IMPLEMENTS INDUSTRY*			EXPORTS OF AGRICULTURAL IMPLEMENTS† (IN \$1,000,000)	FARM TRACTORS	
	NUMBER OF ESTABLISHMENTS	NUMBER OF EMPLOYEES	VALUE OF PRODUCTS IN \$1,000,000		VALUE OF OUTPUT IN \$1,000,000	VALUE OF EXPORTS IN \$1,000,000
1849	1333	7,220	7			
1859	1982	14,814	18			
1869	2076	25,249	52	1		
1879	1943	39,580	69	3		
1889	910	38,827	81	4		
1899	715	46,582	101	12		
1904	648	47,394	112	23		
1909	640	50,551	146	26		
1914	601	48,459	164	32	18	4‡
1919	521	54,368	305	73	173	29
1921	353	30,359	164	46	51	8
1923	312	30,962	151	50	92	15
1925	303	28,696	169	77	121	33
1927	277	33,646	203	91	160	46

* This industry embraces only establishments which were engaged primarily in the manufacture of implements of cultivation, of harvesting machinery, of machines for preparing crops for market or use and of miscellaneous small agricultural implements. For the period 1899-1919 the data cover only establishments with an annual output of \$500 or more. For the period 1921-27 the data cover establishments with an annual output of \$5000 or more.

† In addition to the items enumerated above, this includes dairy machinery, farm tractors and windmills. For the years previous to 1919 the exports are given for fiscal years ending June 30. The figure for 1869 is for the fiscal year ending June 30, 1870.

‡ This is an average for the period 1910-14.

The manufacture of farm equipment for local needs is found in practically every country. It is usually confined, however, to the production of cheaper, lighter implements and to the adaptation of foreign models to peculiar local needs. The production of separate lines of farm equipment is extensively developed in some countries. Sweden is an important producer of cream separators and exports this product to the four corners of the earth. The manufacture of tractors was stimulated recently in France and Italy in order to reduce the need for imports and to obtain a lower priced product. In Australia and New Zealand a local industry developed, which attempted to adapt agricultural implements to the peculiarities of the agricultural processes of that continent.

in this line. Heavier machines were manufactured by works not specializing in farm equipment; the largest of them depended upon the Dominion and Argentine markets for the disposal of the greater part of their output. At the same time England imported 30 percent of the equipment used on its own farms; after the war this proportion increased due to the growing popularity of American tractors. Because of the inroads of foreign competition the industry was at the outbreak of the war in a depressed condition; it has been in a worse plight since the beginning of the last decade. During this period it has shown a tendency to form combinations; nearly all of the largest firms and those of the highest standing are now members of one or another of a small number of groups. The trade

association of the agricultural engineering industry is promoting standard cost keeping systems and the regulation of price and discounts through "sympathetic agreements."

In Germany the industry developed in the second half of the nineteenth century through the attempts to adapt English and American implements to a variety of local needs. An important stimulus was also found in the proximity of large foreign markets, such as Russia and the Balkan countries, which were in obvious need both of cheaper implements and longer credit terms than could be provided by English and American exporters. In the late seventies the general industrial development of the country and the necessity for the intensification of agriculture as a protection against overseas competition encouraged the further growth of this branch of manufacture. The organization in 1883 of the Deutsche Landwirtschafts-Gesellschaft, which carried on an active educational campaign among farmers, and the multiplication of cooperative credit and purchase societies have tended to enlarge the absorption capacity of the domestic market. By 1900 there were in Germany, according to Gustav Fischer's estimate, 1200 plants employing 23,000 persons. Plows constituted the most important product, some of the German makes being well liked in many European countries and in South America. Since 1902 the German industry has lived under the regime of protection, so that by 1906 exports exceeded imports; before the outbreak of the war two thirds of the total output was exported and fully a half of this was sold to Russia. The war has resulted in an increased output for domestic uses and in a reorganization of the manufacturing processes to permit mass production and greater standardization of implement types. With the termination of the war many war munitions plants have turned to the production of agricultural equipment; the Krupp plant, for instance, has almost tripled its production in this line. It is estimated that the German industry in 1920 numbered 800 plants employing 75,000 persons. More recently Germany has considerably enlarged its production of farm tractors, and in 1928 for the first time exports of tractors exceeded imports.

The fortunes of the agricultural machinery industry are very closely related to the prosperity of agriculture. The world wide agricultural depression which has prevailed since the war and the elimination of Russia as a large importing country have put the industry in an

unsatisfactory condition. A greater standardization of simple implements, the development of new types of machines better adapted to use with tractors and designed to mechanize the performance of tasks still done by hand (cotton pickers, improved sugar cane machines), business reorganization which will enable single concerns to manufacture and sell more or less complete outfits of farm equipment, are present day tendencies which are expected to restore more normal conditions in the industry. The application of electricity to farming, still in the experimental stage, is an unknown factor and may completely revolutionize the industry.

SOLOMON KUZNETS

See: AGRICULTURAL MACHINERY; TRUSTS; AUTOMOBILE INVENTION; MACHINES AND TOOLS; POWER INDUSTRY.

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AGRICULTURAL MARKETING.

HISTORY. It is only in relatively recent years that the always vague and shifting line of demarcation between the marketing of agricultural and of non-agricultural products has become significant. The sheep or the corn which the early cultivator of the soil bartered for the copper or fine clay of a neighboring group was but one of a few exchangeable products, hardly to be distinguished in method of disposition from the weapons of wood or metal which might find their way into the channels of trade. With the growth of city civilizations trade in foodstuffs became a somewhat specialized ac-

tivity, but the techniques of marketing wheat or spices, silks or fine gems, are essentially similar. The product of agriculture is but slightly differentiated in methods of distribution from the product of a small scale, hand industry.

The recorded history of marketing in the ancient world deals chiefly with the foreign commerce of the great city centers of population in Egypt, Babylon, India, China, Greece and Rome. At all times a large share of this commerce was in foodstuffs and other agricultural products. Athens exported olive oil, figs and honey. But Athens was not an agricultural state and had to import half her food supply. Her wheat, for instance, came largely from southern Russia by way of the Black Sea. The data are lacking, however, to show us just how these primitive Russian farmers marketed their wheat and in what form they took their pay. The Code of Hammurabi shows clearly that Babylon carried on a vast commerce as early as 2300 B.C. Silver and gold were used for money, banking functions were carried on by the merchants, and wheat, wines, sheep and wool were among the agricultural products exported. Egypt for many centuries was shipping linen, paper and wheat to neighboring lands. Rome's commerce is well known, especially after the first century of the empire. This was the period of the "hygienic markets and splendid shops of Rome," as it was the period of great prosperity of Roman agriculture and stock raising. There was a tremendous development of trade, both wholesale and retail. Safe and easy communication was established with all nearby countries; the Mediterranean and Black seas were regarded as Roman lakes; the great rivers of western Europe and the Nile were highways for Roman commerce; caravans of camels traversed all southern Asia and northern Africa; the sea route was used to India, Arabia and the north coast of Europe. Regular commercial relations were established with China, India, Africa (northern, central and southern), central Asia, southern Russia, Germany, Norway, Sweden, Britian, Gaul, Spain. Into the shops of Rome came metals, precious woods, precious stones, amber, silk, furs, as well as luxuries for the table from the farms of the world. From the fields of Italy came poultry, cattle, wheat, olives and wines.

With the breaking of these lines of trade in the disturbed years of the early Middle Ages and the return to community self-sufficiency

in the manorial system, the marketing of agricultural products became again largely a local affair. Most farming before 1300, when that system reached its highest development, was largely self-sufficient and involved very little actual bartering or buying and selling. But if the manor produced most of its own foodstuffs it was also independent of outside communities for the supply of most of its clothes, furniture, weapons and instruments of production. This self-sufficiency was only relative and of short duration. The spices and luxuries of the East slowly filtered into Europe through the barriers of difficult transportation and hostile separated communities. Agricultural products played their part in the reviving trade. In the great fairs to which foreign merchants brought their wares, and in the lesser markets which provided a means of local exchange, corn and wool and wine were traded for the product of the city guildsman or the luxuries of a far land.

Periodic fairs, large and small, were the most important marketing mechanism of the Middle Ages. A considerable amount of intra-manorial exchange was accomplished in the payment of the various manorial dues, but in good years there was always a surplus to be sold at the local market and thence carried by the itinerant trader to the larger fair. These institutions apparently grew up first as religious rather than as commercial activities. They usually began in religious assemblies about monasteries or shrines on feast days. Said one French writer: "There is no great festival without a fair; no fair without a festival." The religious element remained important; but at the great fairs of Bordeaux and Champagne, or St. Giles and St. Botolph, it was the commercial opportunity that was dominant throughout the days or weeks that merchants and customers were assembled. And as with the increase of population, the facilitation of transport and the growth of cities the periodic fair was supplemented and finally largely supplanted by regular local markets, a complex commercial system developed.

Even this relatively direct form of marketing involved an elaborate organization of merchants and traders, speculators and lenders of money; it resulted in the formation of commercial leagues and the establishment of foreign trading centers. As cities grew in size and influence, the principal role in the marketing mechanism passed from the trader gathering surplus grain

from one local market after another, to the merchant and his factor bargaining for the control of the next year's crop from a whole region. And slowly, throughout the seventeenth and eighteenth centuries, the public markets of the cities were replaced by the wholesale exchange and the retailer with his permanent shop and stock of goods on sale every business day. The same process of elaboration of the marketing mechanism was going on in the textile trades or in the woolen industries. The disorganization of such changes was more noticeable in regard to agriculture, for the danger of famine or dearth was ever in the background. Local supplies were drawn to the cities, and as in modern times agricultural surpluses frequently existed alongside of agricultural dearths. Governments unsuccessfully attempted to prevent dearth by controlling exportation, and the trader was more and more successful in freeing himself from governmental supervision.

Not only were changes in the methods of distribution of agricultural and of manufactured products occurring simultaneously and in similar directions during the seventeenth and eighteenth centuries; in many countries there was taking place an "agrarian revolution" which was bringing into prominence new agricultural products and a new organization of agricultural production. The changes were in line with the increasingly commercial emphasis of society. But the adjustment was of short duration. By the end of the eighteenth century there had begun that process of industrialization which so altered the position of agriculture in the economic order. Great as have been the transformations in methods of distribution of agricultural products whenever city civilizations have arisen, there has never until the past century been a time when agricultural products were not the most important articles of commerce. Now, although the food supply is still basic, society is timed to the furnaces of the steel mills rather than to the harvest and the fruit crop, and the complexities of the financial superstructure are greater than they have ever been before.

Not only must the agriculturist move in the shadow of the industrial system, but all his contacts with the commercial and industrial system have become more direct and immediate. The farmer no longer lives in relative isolation and self-sufficiency, relying upon the merchant to gather his bit of surplus grain; he must now plan for the market—indeed his

whole method of living must be directed toward the commercial disposition of his products. An increasing complexity of the market mechanism has resulted, for this system into which the farmer must fit includes also the great grain and raw material producing areas of the new continents or of the "backward countries." It is a system in which the development of world exchanges first facilitates and then enforces competition between the staple products of the smallest farm in the United States and the largest ranch in Australia.

With all its increasing complexity the system is still inadequate to effect a smooth or stable adjustment of agriculture to the economic order. Even where large scale machine methods and modern systems of accounting are applied to agriculture, its dissimilarities to other industries are striking. It is, in the first place, not one but many industries, where one farmer may produce staple food products for a world market, industrial raw materials for a distant industry and dairy products or fresh vegetables for the nearby urban communities. Even with specialization there are definite limits to the consolidation of agricultural units. More important is the almost insuperable difficulty of regulating the quantities of agricultural products. It is not merely that weather is uncertain and production seasonal but that there is no method of controlling the output of the innumerable small producers throughout the world. The maladjustments which result from these difficulties press almost equally as hard upon groups which remain outside the industrial-capitalistic system as upon those which have been drawn almost entirely within it.

Agencies and methods of organization have grown up from within and from without the system of agricultural marketing. Railroad rates and automobile costs, the concentration of the milling and sugar industries and the demands of textile manufacturers set a pattern to which the system of agricultural marketing must conform, while the development of world commodity exchanges, of cooperative marketing, of methods of refrigeration and storage bring stabilization and pattern from within. The pattern is yet incomplete and constantly shifting, but its main outlines can be traced.

UNITED STATES. In the United States agriculture is now quite generally on a commercial basis, that is, the farmer sells most of what he produces and buys most of what he consumes.

The marketing process consists of six fundamental operations—production, transportation, storage, credit, risk bearing and sale.

To perform the various marketing services implied by these functions many different types of middlemen have been evolved. Transportation is of considerable importance in the United States, where the average haul of food is about one thousand miles. The railroads are still the most important transportation agency for agriculture as for other industries. Indeed the development of methods of refrigeration has increased their importance. But it is also true that automobile transport has had far reaching effects on agricultural marketing. The truck and the paved road have increased the radius of influence of local markets and made possible new utilizations of land. They have reduced not only the farmer's social isolation but his economic remoteness, with results which cannot yet be measured.

Storage in the United States has made enormous progress in the last fifty years, particularly in the fields requiring artificial refrigeration. Millions of tons of foods are now stored in the summer awaiting the autumn and winter demands. The quality of the food remains good; the price is greatly stabilized to the farmer's advantage. Such storage is feasible for butter, eggs, poultry, fresh meats, cream and many kinds of fruits and vegetables. Dry storage is provided for grain in the form of country and terminal elevators. Warm storage takes care of such foodstuffs as bananas, sweet potatoes and white potatoes.

Although the furnishing of credit has become one of the most specialized of modern services, the farmer is not entirely dependent upon the ordinary commercial agencies. In most countries governments have provided special systems of agricultural credit (*q.v.*). Risk bearing may be distributed by the farmer in many cases by means of insurance. Risk is also lessened by a wise treatment of the fundamental factors of uncertainty, many of which are subject to human control. Grading and standardizing are doing much to lessen business disputes, particularly disputes over the rejection of consigned goods. Better quality production, more thorough culling, better packaging and loading—all these activities are lessening the risks of loss and damage in transit. There remain, however, many economic risks which cannot be eliminated.

The sale of any product is today a highly

specialized activity. The relationships of the various middlemen who are concerned are constantly shifting with new methods of production and distribution. The usual classification of sellers has been the threefold one of wholesaler, jobber and retailer. The functions of wholesaler and jobber, both of whom buy in large quantities and sell in smaller amounts, tend to overlap. In most industries both are gradually being replaced by other, usually more specialized, types of distributors. This tendency is apparent in the marketing of agricultural products, although it operates more slowly than in the case of large scale industries.

Among the newer types of middlemen, brokers and commission merchants are dealers who act as agents between buyers and sellers, but do not take title to the goods. Brokerage fees usually run from 1 to 2 percent; commissions from 1 to 15 percent of the selling price. The commission merchant, receiving the goods on consignment, does a certain amount of physical handling. The broker usually has no handling of the goods, but finds buyers by means of interviews, letters or wire. As commodities become better graded and standardized the number of brokers increases, while that of commission merchants decreases. Livestock, wool and wheat are still sold almost entirely by commission merchants, for personal inspection before purchase is here necessary to determine actual values.

One of the more important of the new agencies which are introducing economies into the distribution of agricultural products is cooperative marketing. It has achieved substantial success in grain, dairy products, livestock, fruits and vegetables, and nuts. In grain the five thousand farmers' elevators were and are successful in overcoming certain trade abuses. In the dairy industry the local creameries or cheese factories have now in many sections improved the quality of their products, standardized them and moved them in large quantities, so that savings have been made, consumer demand increased and prices thereby strengthened. The Minnesota creameries by cooperating and shipping butter in car lots, rather than in less than car lots, were able to save ten thousand dollars a week in freight alone.

Auctions provide a means of distribution for some products. They are used extensively in most of the large cities for the sale of citrus fruits, grapes and certain deciduous fruits. This affords a much cheaper method than the old

fashioned commission merchant. In New York attempts have been made to use the auction in the sale of eggs, and the method is slowly growing in favor. The farmers of Kern County, California, have for many years made successful use of the auction in marketing hogs, competing buyers coming from San Francisco and Los Angeles. The cost of this service is very low.

Chain stores have entered the field of selling fresh fruits and vegetables, with notable changes in our marketing system. Their policy is to purchase in large volume and to demand standardized products of relatively high quality. Such purchases are more and more made through cooperative organizations of producers.

Roadside markets are the simplest form of direct marketing used by the farmer. With the coming of good roads and the automobile the farmers near large cities and the smaller mill towns find customers at their door for their fresh fruits and vegetables, eggs, flowers and various other products. With unpaid family labor and long hours the farmer can move a large volume of produce in this way with negligible expense. An increasing amount of produce is also distributed by means of parcel post.

The general pattern of agricultural marketing is set by these agencies and methods. In addition special mechanisms have been developed for marketing each farm commodity. The better standardized commodities are now bought and sold on organized commodity exchanges. This is true of grains, cotton, butter and eggs, and certain pork products (mess pork, ribs, lard). In these products there is future trading and hence continuous price quotations. At the other extreme are found the perishable fruits and vegetables such as peaches, strawberries and tomatoes, which have no organized markets and no official price quotations. Between these two extremes come the semi-perishable commodities such as potatoes and apples, which can be stored but not beyond one season. There is no organized market for such commodities, but a large number of central markets.

Grain and cotton may be taken as types of the standard commodities moving freely in the channels of world commerce. Wheat, grown on two million farms in forty-four states, moves first to the nearest railroad station or flour mill. Here it is sold for cash, usually to the country elevator. Such elevators are of four types: independent (owned by local business man); farmers'; line (owned by corporation at central markets); mill. If the grain goes to a farmers'

elevator (and 56 percent of all grain reaching Chicago comes from farmers' elevators), the routine is as follows: the farmer is paid with money borrowed from the bank or advanced by the commission merchant at the central market. Grain paper, so-called, is standard liquid security for bank loans at the lowest current rates. Bills of lading or warehouse receipts constitute the usual collateral for such credit. The grain in the country elevator is either consigned, or is sold by wire "to arrive," that is, for deferred shipment, the price and the time of shipment being stipulated in the bid. Arrived at the terminal market, the grain is sold to a terminal elevator owner, an exporter, a miller or some of the grain industries. The buyer hedges himself against loss from price decline by selling a future on the grain exchange, speculators being the chief buyers of futures. The effect of this hedging or price insurance is to enable the market in the fall to absorb without a price depression millions of bushels of grain dumped day after day.

Cotton may be compared with wheat: both are liquid commodities; both move away from the farms into the channels of world commerce; both are financed at low cost because of the standard trade documents involved; both are subject to federal grading and may be stored for long periods with little deterioration; both are subject to future trading on the organized exchanges of Europe and America; both have continuous market quotations. In contrast to cotton or wheat is corn. For while corn is a staple commodity, 80 percent of that produced in the United States is consumed on the farm. Indeed it is estimated that farmers use 40 percent of all agricultural products as raw material for further production.

Livestock is marketed in an entirely different manner from that used in connection with cotton and wheat. While a certain amount is prepared on the farm or by local butchers, about 60 percent of all the meat slaughtering is done in the large central markets which are served by public stockyards. Farmers may sell to a local livestock buyer who consigns to a commission merchant at the stockyards, or the farmer may consign his own car to the same agency. At the stockyards the commission merchant faces five types of buyers: the packers; city butchers; order buyers (who buy to ship to another market); speculators (who buy to sell again on the same market); buyers of stockers and feeders (who buy stock not yet "fin-

ished," but which must be shipped back to feeders in the country). Two significant changes in recent years have broken into this routine of marketing. Cooperative marketing, through local livestock shipping associations, assembles and ships in car lots for the farmer at a minimum of cost for the service; at all the big packing centers there are now cooperative agencies to sell in competition with the regular commission merchants. The second change is the so-called direct packer buying, a new method whereby packers send buyers to the country and buy from farmers. In either case the price quotations established at the stockyards are the only price barometer the farmer has.

Milk is by far the most valuable product of American agriculture. Whole milk for city consumption is now largely handled by farmers' cooperative dairy associations doing collective bargaining with the city distributors. The two milk by-products, butter and cheese, account for about 50 percent of the milk produced. These two things are handled quite generally by local cooperative concerns, federated for purposes of inspection, grading, standardizing and better merchandising.

The marketing of fruits and vegetables is especially confused, except in those specialized areas where cooperative organizations have standardized the product and put it on the market under their own brand. The markets suffer from alternation between oversupply and dearth, and there is no adequate price barometer to serve as a guide to production.

In recent years federal regulation of marketing has been introduced to cure trade abuses and to promote the interests of the producer. The federal government has established grades and standards for about one hundred commodities, and also provides for optional shipping point and terminal inspection where made necessary by the volume of business. In addition to the regular research studies and administrative activities of the United States Department of Agriculture and its Bureau of Agricultural Economics in the field of marketing, there have been four outstanding regulative acts in recent years: the United States Warehouse Act of 1916, aiming to improve storage and to provide cheaper credit by means of the warehouse receipt; the Grain Standards Act of 1916, a law providing uniform federal grades for grain and also federal supervision of all state and local grain inspection systems; the Packers and Stockyards Act of 1921, giving the secretary

of agriculture power to supervise and regulate the packers and the stockyard companies; the Grain Futures Act of 1922, giving the secretary of agriculture authority and power to supervise and regulate grain futures markets and to prevent manipulation and corners. In comparison with the past, however, the freedom of internal trade is the distinguishing feature of our agricultural marketing system.

JAMES E. BOYLE

EUROPE. The great industrial development of the early nineteenth century in Europe was confined to certain clearly defined regions and, while agriculture in the surrounding countries was quick to react to the stimulus of the new markets, national boundaries and inadequate transport facilities caused the more distant peasant communities to be left undisturbed for a long time by the new circumstances. No intricate system of marketing of produce within the countries themselves was necessary. Organization of an export trade in food from the rural countries to the industrialized countries was of slow growth. By the end of the century, however, marketing systems had been evolved to draw upon the surplus supplies of even the more backward agricultural communities.

More progressive marketing methods have since been adopted, but century old practises continue to exist side by side with modern developments; even the upheaval in the marketing of foodstuffs caused by the war of 1914-18 did not completely abolish traditional methods. In the last two or three decades in the export trade the marketing of dairy products has been the most progressive. With regard to products sold in home markets, the organization of the marketing of liquid milk has undergone the greatest changes. The latter has been rendered necessary, first, by the increasing demands for fresh milk in urban areas and, second, by the continually rising hygienic standards which are being set for the production and handling of the milk. Progress in the marketing of exported dairy produce may be very largely due to the example and high standard set on the British market by the Danish butter producers.

Factors which influence marketing organization over a whole continent of more than twenty independent nations are so numerous as almost to defy analysis. In general, systems of disposal of produce by farmers may be said to differ, first, according to the nature of the

commodity; second, according to the nature of the trade, whether for local consumption, for distant consumption within the national boundaries or for export; and third, according to the importance of the commodity in the farm economy. Close attention is often given to the method of disposal of the major produce of the farm, but the minor produce may be "dumped" upon the readiest market.

The direct retailing of produce by the individual farmer to the consumer, presumably the most elementary method of disposal, continues to some extent for most commodities which do not require elaborate preparation, e.g. milk, butter, eggs and fresh vegetables. A rapidly decreasing proportion of farm production finds its outlet in this way. Street markets, operating under increasingly stringent regulations; hawking from door to door; and, to a much less extent, parcel post are the means by which produce is brought direct to the consumer.

So far as can be estimated, the largest proportion of all produce is sold by farmers in the wholesale market. Neglecting for the moment the farmers' cooperative associations, produce is disposed of by farmers to the wholesale and retail traders in three main ways: sale outright in local markets either by private bargain or by auction; sale in distant markets by agents acting for the farmer and paid by commission; and sale on a period contract to one firm. Sales of cattle and sheep by farmers take place mainly in local auction markets, owned and regulated either by municipalities or by auctioneers. Grain is sold by private bargain to merchants. Direct selling to millers has declined owing to the concentration of the milling industry. The larger proportion of fresh vegetables is consigned to distant markets and sold there on commission, but the method of sale varies according to the distance of the farms from a large consuming center. The method of sale on contract to wholesale and retail firms and to factories is increasing with certain kinds of produce. Sugar beet is universally sold on contract to factories; fresh fruit for preserves, milk either for the liquid trade or for manufacture, and eggs show a marked tendency toward this method.

The more recent developments of agricultural marketing center around the growth of the farmers' cooperative movement and the interest of governments in the prosperity of agriculture. Farmers' cooperative societies in some forms have existed for a very long time in

European countries. Generally speaking, cooperation among farmers for the sale of their produce is more recent than credit and purchase associations. In most of the European countries there has, however, been considerable development in selling societies. In some countries, in almost all kinds of produce from milk products, pig products, eggs and wine to livestock and cereals, progress has been very marked. Cooperative selling by farmers of liquid milk, fresh fruit and vegetables appears to have made less general advance, but abundant examples of successful efforts exist. Among the raw materials for industry, sale and export of flax from the eastern Baltic states are on a cooperative basis, and the organization of wool growers in England and Scotland has shown recent development.

The cooperative movement has the active support, in greater or less degree, of the governments of the various countries. In Soviet Russia and Finland universal cooperative selling in agriculture is the definite policy of the existing governments. Apart from these countries Denmark appears to have the most highly developed cooperative organization in Europe. It has been estimated that nearly 90 percent of the Danish farmers are members of cooperative dairies, while 70 percent disposed of pigs through cooperative abattoirs (1925).

An important development has been the federation of cooperative societies for the export of produce. Denmark furnished the best example of consistent success in this direction for many years, but other European countries are similarly organized. Approximately 40 percent of the butter leaving Denmark is exported by fourteen large export associations serving 580 affiliated local societies (1925). Cooperative societies for export of butter are also important in Russia, Netherlands, Finland, Esthonia and Latvia. The federations of Swiss milk producers very largely control the export of all cheese from Switzerland, while one of their federations is directly engaged in export trade. A very large part of the export of eggs from Denmark is in the hands of a cooperative egg export association with which about 550 local egg collecting stations are affiliated (1925). Other countries from which eggs are exported cooperatively on a large scale are the Netherlands, Russia and Poland. Other commodities in the export of which farmers' cooperative associations exercise considerable influence are bacon from Denmark, flax from the eastern Baltic coun-

tries and currants and raisins from Greece.

A feature of the cooperative marketing of agricultural products to which considerable attention is being directed is the growth of direct trading relations between the agricultural cooperative organizations and the consumers' cooperative societies. As far back as 1896 the Congress of the International Cooperative Alliance endeavored to foster trade relations. More recently encouragement has been given to this movement at the World Economic Conference (1927) by a clause in the general resolution on agriculture, and by a special resolution expanding the views of the conference on this question.

The war time restrictions of governments upon the sale of agricultural produce have almost entirely disappeared, but the active interest of governments in the trade in agricultural produce is manifested in many ways. Government monopolies in tobacco exist in several countries, and flax is a government monopoly in Latvia. There are other countries in which the governments have had a direct participation in the trade in agricultural produce, as for example in the case of grain in Norway and of the recently abolished wheat monopoly in Switzerland; but how far any of this is of a reasonably permanent character it is impossible to say.

Apart from direct state trading all governments are giving increased attention to the problems of the marketing of produce. The encouragement of cooperative effort has already been referred to. Official grading of farm produce for export has been in operation in certain European countries for many years, but since the war of 1914-18 more care has been exercised in this direction, together with the establishment of "official marks," especially in countries exporting dairy produce and eggs. Official grading and marking of produce by a "national mark" for the home market has recently been made the object of schemes developed by the Ministry of Agriculture for England and Wales and the Department of Agriculture for Scotland.

Farmers also obtain increased benefits in marketing from other state activities such as the prevention of fraudulent dealing, the control of freight charges, the issue of market intelligence concerning supplies and prices, and the expansion of facilities for economic research in marketing.

JOHN P. MAXTON

See: AGRICULTURAL COOPERATION; MARKETING; STORAGE; GRADING; REFRIGERATION; WAREHOUSING;

MARKET INFORMATION; AUCTIONS; FAIRS; MARKETS, MUNICIPAL; COMMODITY EXCHANGES; GRAIN ELEVATORS; MIDDLEMAN; VALORIZATION; FOOD SUPPLY; FOOD AND DRUG REGULATION; AGRICULTURE, GOVERNMENT SERVICES FOR; FOOD GRAINS; DAIRY INDUSTRY; COTTON; WOOL; TOBACCO; FRUIT INDUSTRY; MARKET GARDENING; CANNING INDUSTRY; COFFEE; RUBBER; LIVESTOCK INDUSTRY; MEAT PACKING AND SLAUGHTERING; AGRICULTURE; AGRICULTURAL POLICIES; AGRARIAN MOVEMENTS.

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AGRICULTURAL POLICY. From ancient times to the present the policies of government toward agriculture have necessarily occupied a large place in the attention of statesmen, since agricultural products furnish not only the subsistence of the people but also a considerable part of the raw materials of industry and are a major item of commerce. In a broad way such policies may be grouped under three heads. First is the extreme position that agriculture should be fostered as a prime source of national strength. Second, and at the opposite extreme, is the policy of complete or virtual disregard of agriculture and dependence on imported food and raw materials of industry. Between these two extremes we find a third policy which looks in a general way toward self-sufficiency. The

country which follows this policy aims to supply in the main its own agricultural needs but does not seek to derive any considerable part of its national income from the export of agricultural surpluses.

A highly developed agricultural or industrial policy is more likely to be established at the present time when adequate transportation facilities or great scientific and technical knowledge have made extreme types of economic specialization feasible. It is also evident that small countries will probably find themselves forced into rather intensive development of a single line of production, or at best a narrow range of specialization, whereas countries of broad geographic extent and considerable diversity of natural resources find a high degree of self-sufficiency both natural and profitable. The British Isles probably present the best illustration of highly developed industrial growth and comparative indifference to agriculture. Economic resources and the momentum of early development create so great a comparative advantage in the fields of mining, manufacture and trade as to make any thoroughgoing policy of agricultural stimulation impracticable. Great Britain typifies the most extreme development of an industrialized country content to be dependent upon overseas producers for the bulk of her agricultural supplies, feeling secure in the possession of a powerful navy, ample merchant marine, a highly developed trade organization and a dominant financial position. The World War so shook the bases of this confidence as to start an almost hysterical agitation for the rehabilitation of agriculture even to the extent, as some of the extremists demanded, of self-sufficiency in the staples of subsistence. The practical result has been some liberalization in land policy, a stimulus to agricultural education, protective legislation for the agricultural laborer and a somewhat more generous encouragement of husbandry in general. But even post-war Britain, with the vivid memory of threatened famine under conditions of submarine warfare, has found it impracticable to do much toward reviving an agricultural industry which had been waning since the coming of the industrial revolution. To a certain extent Great Britain seeks to effect a favorable exchange situation between her own industrial and commercial enterprise and the agricultural predisposition of the scattered members of the empire. Actually, however, England follows the current of economic rather than political affilia-

tion and finds that Argentinian beef and Danish butter fit into this system quite as well as Canadian wheat and New Zealand lamb.

In Germany industrial development was intensive in the western provinces in the late decades of the nineteenth century, but the east embraced a large agricultural domain whose representatives attained a potentially dominant position under the empire. The agrarianism of the Prussian *Junker* was that of one who was both militarist and landlord, and he was working for his own personal interests at the same time that he was providing his country with an internal supply of bread grain in case of war.

It is somewhat paradoxical that, although the dominance of the *Junker* has now been superseded by the dominance of the western industrialist, even post-war German policy favors agricultural development. This is a result of the post-war industrial and commercial position, which has been unfavorable to the securing of imports of food and agricultural raw materials on advantageous terms. Hence it has appeared necessary to resort to agricultural tariffs and other devices to stimulate domestic supplies. This line of action, however, must be regarded as a temporary expedient rather than a permanent adjustment. Germany's agricultural resources, none too ample in the days of the empire, were seriously curtailed in the fixing of national boundaries under the Treaty of Versailles, and it seems inevitable that the ultimate realization of the country's maximum economic potentialities must be dependent chiefly on her industrial and commercial development. This means the reestablishment of advantageous reciprocal relations with countries more favorably circumstanced for agricultural specialization. In terms of geographic proximity and natural resources Russia is capable of playing such a role. But Russia's sluggish general economic recovery and the disparity between an increase in agricultural productivity and the growth of population, with the accompanying elevation of the standard of living, makes this solution improbable at present.

It seems self-evident that Russia's resources foreordain her to an agricultural future which will overshadow her industrial achievement, considerable though that may be. Imperial Russia manifested considerable concern in providing transportation facilities and in furthering manufacturing and commercial development during the closing years of the nineteenth century and in the twentieth century before the

outbreak of the World War. Although the Revolution of 1905 forced the czarist government to recognize that something had to be done to relieve the peasants, little was done to facilitate in any real sense the development of Russia's agricultural potentialities. The policy inaugurated by Stolypin contemplated an improvement of agricultural technique and a development of agricultural resources through colonization of Siberia. The prosecution of this policy was interrupted first by the World War and then by the Revolution of 1917, which brought in its wake expropriation of land belonging to large estates and its distribution, with insignificant exceptions, among the peasants.

After the stormy period of 1918-21 the Soviet regime set itself definitely to rebuilding the economic life of Russia out of its own resources. This has meant a liberal policy toward the peasant in order to expand agricultural production as fully as possible. The principal result has been to strengthen the rich peasants, the *kulaks*, to a point which has embarrassed the Communist party. Hence in 1928 it felt constrained to put more emphasis on the policy of "agrarian socialization." An important feature of this program is the development of large scale collectivist farms designed to increase the agricultural product at the disposal of the government, to demonstrate the technical superiority of this mode of farming and to provide profitable employment for the poor peasants. On the whole the Soviet government is committed to a policy of fostering the development of manufacturing industries which would make Russia economically self-sufficient. However, the immediate need for an agricultural export surplus and the fact that the majority of the population is still engaged in farming makes inevitable for the near future a policy of continuous stimulation of agricultural production.

Italy has recently entered upon a program intended to increase agricultural productivity. Agricultural education, in comparison with popular education, is quite impressive, and considerable effort has also been made to set up a system of rural finance and cooperative organizations. Since the war a vigorous attempt has been made to increase the home supply of bread grains in order to strengthen her position in international trade. Although the movement has thus far been disappointing, an even more ambitious program for the future is now being pushed forward. It contemplates large outlays

of public funds and an aggressive, almost coercive, stimulation of private enterprise to reclaim several million acres of additional lands as well as the more intensive cultivation of those already in use. The purpose of this policy is to assure Italy's independence of wheat imports even though it is admitted that wheat from Canada or one of the other newer countries would be far less costly. The program is defended on the ground that the dense population of the country provides a surplus of labor which cannot be applied to the production of export commodities sufficient to give the nation the purchasing power necessary for the importation of the requisite supply of wheat. Fascist policy emphasizes agricultural self-sufficiency chiefly because of the pressure of population and an unwillingness to accept the alternatives of emigration or of birth control. This suggests that the present policy of agricultural stimulation will be continued.

As compared with the rest of western Europe, Denmark stands out as distinctly agrarian. During the last seventy-five years, while industrialism has been growing in the neighboring countries, Denmark, admitting her poverty in industrial resources, has applied herself with the utmost skill and diligence to the intensive development of her agriculture. This policy, both democratic and practical, has built up a remarkable system of agricultural education and fitted commercial, banking and transportation services to the needs of the agricultural population. Recently there has been a considerable increase in the number of the urban population engaged in those branches of manufacture which represent a more intensive utilization of agricultural produce. Because land resources are already so fully employed that any increase in population cannot be used effectively in primary production, it has become a concern of the government to carry the processing of these farm products as far as possible and to provide the services incidental to this basic agricultural industry as fully as possible within the country itself. The agrarianism of Denmark thus has a distinctly different character from that of a younger sparsely settled country following an intensive line of agriculture and exporting the product in its raw state or with a minimum of processing.

Other countries which have definite, though less developed, agricultural policies may be found in Europe, particularly those that are in the Baltic (Latvia, Esthonia) and in the

Danube regions. Countries in the latter group were swept by a wave of land reform immediately following the World War which contemplated a supplanting of the old aristocratic estate system by one of small peasant proprietorship. In this the purpose was primarily social and political rather than economic, and led to a falling off in cereal exports, owing to a decline in efficiency of production and to more liberal consumption by the peasants. These countries have found that the decrease in wheat exports has resulted in an unfavorable trade balance and they are now taking steps to increase the efficiency of agriculture.

Rumania and Czechoslovakia have carried out the program of the division of large estates most consistently and effectively, and they have done much to organize the farmers and to educate them in the modern methods of agriculture. Bulgaria and Jugoslavia had less of a problem of land reform, but have both been active in the program of agricultural education and technical improvement. In several of these countries, notably Czechoslovakia and Hungary where industrial development is roughly equivalent to interest in agriculture, close attention is being given to agriculture in a balanced national policy.

Outside of Europe we find emphasis on agricultural production most pronounced in the lands of comparatively recent settlement whose sparse population, limited capital and meager industrial raw materials predispose them toward the business of supplying agricultural raw materials to the great industrial centers. Argentina presents an interesting illustration of a country in which the present development and future outlook seem definitely to be cast in agricultural terms and yet in which no very vigorous or daring program of assistance to the farmer and stimulus to the agricultural industry has been worked out. Several of the British dominions, on the other hand, have shown a tendency, particularly during and after the World War, to build up agricultural efficiency and accelerate the rate of agricultural exploitation through liberal land systems, transportation aids, effective credit institutions and practical systems of popular education. Such schemes of government aid of export marketing experiments designed to increase the efficiency of the handling process and improve the commercial position of the producers as a group are still being developed in Canada, Australia, New Zealand and South Africa. In several cases these coun-

tries have espoused even more radical measures to strengthen the position of their agricultural producers in the world market. These include, in addition to the fostering of wheat pools and other centralized cooperative organizations, experimental legislation in the field of compulsory cooperation and the establishment of supervisory boards exercising considerable regulatory power over given branches of agricultural industry. The prairie provinces of Canada, for instance, have perfected a voluntary cooperative wheat pool possessed of the chief advantages of the war time government grain monopoly but at the same time working out experimentally the possibilities of a large scale effective organization of private agriculture. Canada is an outstanding example of a country with provincial governments not only distinctly agrarian in origin and outlook, but so organized and with such a party alignment as to make the weight of the agrarian interest felt in the field of Dominion government.

Agricultural policy in the United States has varied considerably in emphasis. Throughout the first hundred years of our national history we were so dominantly an agricultural country that any effort toward national progress almost of necessity included a policy of support and stimulation for agrarian interests. In the pre-Civil War period the farming industry was helped by a liberal land policy, rather aggressive governmental aid to transportation development and freedom of immigration. There were also some bits of tariff protection and a moderate effort along educational lines. All this tended simply to hasten the country's natural growth in the rich soil of its agricultural resources. Our economic system was based on maximum freedom of enterprise, and farmers were left, broadly speaking, to work out their own destinies in a land of pioneer opportunity.

After the Civil War the Homestead Act and subsequent land distributing measures, along with the liberal aid to railroad building, accelerated the growth of our agricultural domain. At the same time the establishment and expansion of departments of agriculture, agricultural colleges and agricultural experiment stations added to previous educational efforts to increase the nation's agricultural production. Obviously all this did not constitute a policy of encouragement of agriculture as against or superior to a desire for the nation's industrial growth. The improvement of transportation facilities ministered to the growth of industry as well as

of agriculture, and the flood of cheap food and raw materials resulting from the growth of our farming industry did much to facilitate the establishment and progress of manufacturers. The first point at which any major clash of interests was settled by action definitely favorable to the farmer came with the passing of the Granger railroad laws and the establishment of the Interstate Commerce Commission in 1887.

The severe agricultural depression of the middle nineties brought out sharply the fiscal aspect of the farmer's problem. With an almost universal desire for individual ownership, farmers in America have been habitually in the debtor class. As such they would have been inevitably opposed to any financial policy which would lower the general price level and they have insisted on liberal credit extension and low interest rates. Their attitude has been strikingly expressed in the greenback movement following the Civil War, in the free-silver controversy of the nineties and in the bitter opposition to such deflationist practises as have followed the World War. In all three of these struggles agrarianism has been upon the losing side, and the financial policies which have triumphed have been those of "sound money" as against inflation for the purpose of lightening the debtor's load. With reference to credit, however, the national policy has tended toward continual liberalization and the building up of credit machinery adapted to the farmer's special needs. The high interest rates which farmers have had to pay, and against which they have protested continually since the days of early pioneer settlement, have been due in part to the natural handicap of sections remote from the centers of capital supply, and of unorganized borrowers whose risk factor was high. These disadvantages have been lessened with the growth of the country and the perfecting of general credit machinery. At the same time, the farmer has made his needs better known. A change in policy emerged gradually in the discussion of money and banking reform that followed the free silver agitation and led up to the passage of the Federal Reserve Act. With the passage of the Federal Farm Loan Act in 1915, and of the Intermediate Credit Act in 1923, the policy of adaptation of the credit machinery to the farmers' needs received definite expression.

A further development of American agricultural policy represents a response to the long reiterated complaints against marketing conditions for agricultural produce. Numerous acts passed by state and federal governments during

the last four or five decades, but especially since about 1913, have provided for grading, standardization, inspection and price reporting in great variety. Since the agricultural depression of 1920 there has been renewed demand for governmental intervention in the price system to eliminate the risks of price fluctuation due to manipulation of the market, seasonal inequalities of supply or even the longer secular movements. This program has been stubbornly opposed thus far, but the legislation of the special session of Congress convened in April, 1929, seems to recognize the propriety of government action looking to the stabilization of markets against manipulative influences and against the results of peculiar climatic conditions. It remains to be seen whether the practical interpretation of this latter doctrine will give a maximum or minimum of governmental assistance, but it seems clear that our policy still excludes the idea of the stabilization of any agricultural industry over a period of years in a position which it could not maintain under such conditions of competition as accompany our system of protective tariff.

E. G. NOURSE

See: AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURE; AGRARIAN MOVEMENTS; NATURAL RESOURCES; FOOD SUPPLY; PROTECTION; COMMERCIAL POLICY; ECONOMIC ORGANIZATION.

Consult: Skalweit, August, *Agrarpolitik*, Handbuch der Wirtschafts- und Sozialwissenschaften, vol. xvii (Berlin 1923) chs. ii, xv-xvii; Sering, Max, *International Price Movements and the Condition of Agriculture in Non-Tropical Countries* (Berlin 1927); Brinkmann, Theodor, *Die dänische Landwirtschaft*, Abhandlungen des staatswissenschaftlichen Seminars in Jena, vol. vi, no. i (Jena 1908); Tschajanoff, A. W., *Die Landwirtschaft des Sowjetbundes*, Untersuchungen des Forschungsinstituts für Agrar- und Siedlungswesen, no. i (Berlin 1926); Hobson, Asher, "Some Economic and Social Phases of French Agriculture" in *Journal of Farm Economics*, vol. vi (1924) 233-44, and "Agricultural Survey of Italy" in U. S. Department of Agriculture, Bureau of Agricultural Economics, *Report F. S. no. 35* (Washington 1926); Costanzo, Giulio, "The Wheat Campaign in Italy" in *International Review of Agricultural Economics*, n. s., vol. iv (1926) 70-86; Nourse, E. G., *American Agriculture and the European Market* (New York 1924), and "Some Economic Factors in an American Agricultural Policy" in *Journal of Farm Economics*, vol. vii (1925) 1-21; Nourse, E. G., and others, "The Outlook for Agriculture" in *Journal of Farm Economics*, vol. ix (1927) 21-52; *The Condition of Agriculture in the United States and Measures for Its Improvement; A Report by the Business Men's Commission on Agriculture* (Washington 1927); Pfannen-schmidt, E., *Die landwirtschaftlichen Produktionsverhältnisse Argentiniens* (Munich 1913).

AGRICULTURAL SOCIETIES for mutual aid and for study of technical problems existed in the Roman Empire and could be found here and there in Europe during the Middle Ages. The agricultural revolution, which changed farm practises, and the development of a philosophy glorifying agriculture and rural life constituted, however, the twofold foundation on which modern technical or scientific agricultural societies were first built. The latter basis was most conspicuous in France, the former in Great Britain. In the middle eighteenth century agricultural societies were formed in Paris, Tours and other cities under the influence of the physiocratic philosophy. In Scotland an agricultural society was established as early as 1723, followed by one in Ireland in 1731, one in the west of England in 1777, and one in London in 1793. The Royal Agricultural Society of Denmark, composed of large estate owners, was founded in 1769, while the first of the Danish educational agricultural societies came into being in 1810. All these organizations, with the exception of the last, were composed of extensive landholders or urban professional men rather than tillers of the soil. Emphasis on practical farming and the everyday problems of rural life developed early in Denmark because of the division of the land into farms suitable for family occupancy and cultivation at the close of the eighteenth century.

The American agricultural societies were founded largely upon the English models. The first such organization—which was not, however, confined to agricultural interests—appears to have been founded on Long Island in 1763, but nothing is known of its activities. The earliest society to make a definite impression was the Philadelphia Society for Promoting Agriculture, formed in 1785. George Washington, Benjamin Franklin and Timothy Pickering were members. In the same year the South Carolina State Agricultural Society was founded. Within the next few years societies were established in various places in the Atlantic coast states, both north and south. The Columbian Agricultural Society, which had national aspirations, was founded at Georgetown, D. C., in 1809. It never achieved its high ambitions. The first Canadian agricultural society was founded in 1798. Inspiration for these societies came both from the desire to improve agriculture by crop rotation, as had been done in England and on the continent, and from the view that rural

life made for private virtue and national greatness. The membership of the societies was made up chiefly of lawyers, merchants, physicians, clergymen and politicians, with a mixture of large landholders and a very few practical farmers. The organizations published scientific papers on agriculture, held meetings at which scientific topics were discussed, and offered prizes for agricultural discoveries. These societies were generally unsuccessful in reaching the working farmers. An exception among these organizations was the Kennebec Society, founded in Maine in 1787 by actual farmers. Its activities, however, were confined chiefly to meetings at which papers were read and discussed.

In 1810 Elkanah Watson, a wealthy retired business man, who had seen the ineffectiveness of the older societies, enlisted the cooperation of his rural neighbors in holding a livestock fair in Pittsfield, Massachusetts. As a result of this the Berkshire Agricultural Society was founded. This, while not strictly the first county society in the United States, really inaugurated the county agricultural society movement. Watson himself was an indefatigable propagandist, and societies were established in practically all the counties of New York and New England, as far south as North Carolina, and as far west as Illinois. State aid had been extended to some of the older state societies and it was inaugurated by New Hampshire in 1817 for the county organizations. Several other states followed suit. The principal achievements of the early county societies, aside from establishing a measure of community interest among farmers, were the cattle shows and fairs with their educational exhibits, their competitions and their social features. The societies increased rapidly until 1825, then declined up to 1835, following which there was somewhat of a revival of interest in them. The state societies continued to exist, gradually adding an increasing proportion of practical farmers. These societies promoted the establishment of boards of agriculture and agricultural schools, and in some cases urged, and succeeded in restoring, the old system of bounties for certain crops. The bounty scheme was unsuccessful. The present state boards and departments of agriculture owe their existence, however, largely to the agricultural societies. These organizations also were in part responsible for the increased interest in agriculture in the middle of the nineteenth century, which eventually led to the

establishment of the Land Grant colleges and the agricultural experiment stations.

In 1852 twelve state agricultural societies formed the United States Agricultural Society, which it was intended should coordinate the work of county as well as state organizations. Its membership included not only farmers but men prominent in politics. It met annually and held national exhibitions and field trials. It exerted powerful influence in behalf of the establishment of the Department of Agriculture (1862). The United States Agricultural Society existed until 1881.

Later the economic problems which had been created by the Civil War and not emphasized by the older societies were dominant in the minds of farmers, who turned in great numbers to the Grange and similar organizations. Subsequently, with the increase in scientific knowledge and the growth of specialized farming, there occurred a differentiation in technical agricultural societies on the basis of the crops grown or livestock raised. Horticulture had always been regarded as somewhat distinct from agriculture in general, and horticultural societies had existed since 1829. In some states they had succeeded in establishing boards of horticulture comparable to the boards of agriculture. In the last quarter of the nineteenth century growing interest in pure bred livestock led to the organization of numerous breed associations, to promote the improvement of the respective breeds and public interest in them. Registries of pure bred stock were started by these societies. The breed organizations now number about two hundred, representing every important breed of dairy cattle, beef cattle, horses, sheep, goats, swine and poultry raised in the United States. Societies were started for specialists in various field crops, vegetables, fruits, nuts and other products. There are also various technical organizations, such as the American Society of Agronomy, composed chiefly of college professors and scientists. Different from any of the societies heretofore mentioned and resembling some of the agricultural clubs in European cities is the Saddle and Sirloin Club, with headquarters in Chicago. Membership, which is by invitation, is intended for leaders in all branches of the livestock industry. It has held contests and employed other methods of stimulating the interest of students in agricultural colleges.

State agricultural societies still exist, but are

less influential than in early days. County agricultural societies have largely disappeared, their places having been taken by county farm bureaus and by local branches of the Grange, the Farmers Union and similar organizations. Local farmers' clubs have come into existence in considerable numbers in the last quarter of a century. Some of them discuss scientific problems, but for the most part their emphasis is upon community improvement.

In most countries, including the United States, the technical or scientific agricultural societies have maintained a traditional isolation, neither joining with other societies of the same type nor federating with economic, political or other organizations of farmers. Close and workable union is found only in Denmark. There all the farmers' societies, of whatever nature, center in the Agricultural Council of Denmark (Landbrugraadet). This is made up of representatives of the Royal Agricultural Society, composed principally of owners of large estates; the educational or technical agricultural societies, numbering one hundred and thirty-seven, which are local and comprise about 90 percent of the farmers; and the federated commodity cooperative associations, to which approximately 85 percent of the farmers belong. This system has worked with marked success in correlating all the agricultural and rural interests of the country. In most European countries the cooperative associations, through which farmers both buy and sell, have outstripped the technical societies in influence.

NELSON ANTRIM CRAWFORD

See: PHYSIOCRATS; AGRICULTURAL FAIRS; AGRICULTURAL EDUCATION; AGRICULTURAL EXPERIMENT STATIONS; AGRICULTURE, GOVERNMENT SERVICES FOR; STOCK BREEDING.

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AGRICULTURE

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I. PRIMITIVE AGRICULTURE. Just how and where mankind fell into the custom of planting and cultivating may always remain a matter for speculation. Among the proposed theories of its origin are those which assume that agriculture began in tropical areas, where it is supposed plants can be grown with minimum effort, and reached its full development when tribes accustomed to this mode of life migrated to drier lands, where greater difficulties were encountered. Another set of theories reverses the process, assuming that agriculture began in arid places where life was hard and vegetation sparse and developed in the effort to protect and to conserve the wild plants. Yet none of these theories need be taken seriously until the data essential to such conclusions are available. However, it appears that the most ancient cultures known to have practised agriculture tended to center in semi-arid areas. This is conspicuous not only in the Old World, as in Egypt and the valley of the Euphrates, but also in the Americas where the most intense development of agriculture occurred in dry sections of Mexico and the South American Andes. While these observed tendencies have been cited as corroborative evidence for the arid land origin theories, the general opinion at present is that the location of these old civilizations in such dry areas was due not to environment alone but to a complex of causes, and that the advanced state of agriculture therein was a result rather than a cause. It may turn out that agriculture is even less arduous in semi-arid lands, since there are many factors in the complex procedure of food production; yet even could we prove that agriculture first became effective in semi-arid lands, it would not necessarily follow that the initial step was in such an environment. We may, however, approach the problem in another way.

A survey of primitive life shows that everywhere man makes use of vegetable food. Except

in arctic and near arctic areas, there are relatively few environmental restrictions on the quantity of such food used, although the kind chosen may be so governed. The cultivated food plants of primitive man fall into two main classes, tubers and grains. The great domestic grains of the world are wheat, rye, barley, oats, maize, rice and millet. Of these wheat, maize and rice stand in the foreground. History and archaeology have so far brought to light no great civilization not largely dependent upon one of these three grains. Non-agricultural peoples make more or less use of cereal substitutes, usually wild grains. These may be the seeds of various grasses, for example wild rice in the Great Lakes region of North America. The extended use of the acorn, especially in aboriginal California, where acorn meal was a staple, may be set down as another example of a cereal substitute, as also is the manioc of South America, which is made into a kind of bread. Returning to the question of origins, the natural assumption is that agriculture came as a shift from wild species to domesticated forms; these transitions may have occurred quite independently of each other. However, since the transition must have been from wild to domestic plants, the place of origin for such domestication may be approximated by locating the parental wild species and its habitat. Such lines of inquiry are both historical and botanical, first to locate the wild species and then to trace the diffusion of the domesticated forms. However, the botanical problem has proved more difficult than might be supposed, because the domestication process produces so many modifications in structure that the identification of the wild plant is uncertain. In the case of maize, for example, there is still some doubt as to the wild ancestral form, but the prevailing opinion is that it was derived from teosinte, a wild grain growing in parts of Mexico. Wheat has been traced to certain wild grains in western Asia and its domestication is

now believed to have occurred in Anatolia under primitive conditions.

Once a plant is domesticated, its cultivation may readily spread from people to people, in so far as climatic conditions permit. In recent discussions of the subject diffusion of agricultural practises and migrations of agricultural peoples are looked upon as the important factors in the spread of domesticated food plants. Should a tribe shift from a region where wild grain abounds, it is conceivable that effort might be made to transplant the grain to the new habitat and thus initiate an agricultural practise. From what is known of culture in general, it seems more than likely that agriculture would develop out of group contact and changing situations.

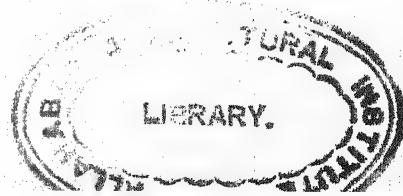
Furthermore there is good reason to believe that the practise of agriculture increases population and that an expanding tribe or village would from time to time throw off a colony seeking new lands. This would spread plants and their cultivation over large areas. But migration is not necessary to the spread of cultivated plants; one tribe may learn from another. Moreover in a large agricultural area a new and better food plant could spread with great rapidity. The geographical distribution of maize in the New World, and of wheat and rice in the Old, suggests such diffusion.

It should be noted, however, that the cultivation of food plants does not stand alone in the culture of a tribe, but is connected with many other culture traits. For example, the mechanization of agriculture is an integral part of primitive mechanics. Among other devices the digging stick, the hoe, the wheel and the plow are the most conspicuous. The substitution of animal for man power in the culture of a people has also a direct influence upon agriculture. It was of course this substitution that made plow culture what it is. A plow drawn by oxen appears in Egypt at an early date and seems to have been even then widely diffused in the Old World. The contrasting type of agriculture which did not use draft animals and the plow is best seen in the New World, where the digging stick and the hoe were the only tools. It is also observable that maize and manioc are adapted to hoe culture, whereas the great cereals of the Old World are still grasses, to be sown rather than hoed. Maize in the wild state seems to have been a grass also, but its cultivation was by the hoe; or, to put the matter differently, the modification of the wild plant was in the direction of adaptation to hoe

culture. The other parts of the world where hoe culture prevailed at the period of modern discovery were central and south Africa and the islands of the Pacific. It is significant that in the Old World the diffusion of plow culture and the cereals, wheat, rice, etc., carried along the ox and possibly the horse. In some parts of Africa although cattle were known the plow was not used. Moreover the use of the cart seems chiefly associated with plow culture. It has been said that the greatness of Old World civilization was due to wheat, and while there is much to be said in support of this, the importance of other associated facts should be noted; it is rather in the combination of wheat, plow, cart and ox that the basis of these old civilizations is to be sought. Whether all these inventions originated contemporaneously and among the same people is not known, but they appear together in early Egyptian and Babylonian cultures and from that time on function in the culture of every Old World power.

That the wheel and plow are early inventions is clear, because their origins can be traced far back into prehistoric time. Most writers follow Tylor in suspecting the plow to have been derived from the hoe and the wheel from a rolling log, but again there are few relevant archaeological and historical facts. Nor can more be said respecting irrigation, a method known to be archaeologically ancient and possibly the first important step in the development of agriculture in semi-arid lands. The effectiveness of agriculture everywhere depends upon human control and adjustment to the factors involved, and given a semi-tropic climate and dry lands as constants and a water supply easily controlled by man, effective agriculture is easy. Finally even the most backward agricultural tribes knew that selection of seed is necessary to improve and conserve domesticated plants, and understood the value of fertilizers. The most that we can say, then, is that agriculture, domestication of draft animals, food plants, the hoe, the plow and the art of irrigation, all emerged on an ancient primitive horizon.

An important social aspect of early agriculture is the concerted effort needed to protect the crop. A small plot of growing plants in a forest clearing or even in a reclaimed semi-arid locality would stand as a constant lure to the wild life of the region. So the growing crop must be guarded not only by day but also by night. This can best be accomplished by arranging the individual plots cultivated in series near the



camp or village, and organizing a system of watchers in relays.

Another important social implication of primitive agriculture lies in the need for instruction in technique. Among the important procedures are the selection of the seed and the choosing of the time for planting and for harvesting. This function may be served in part by the planting and harvest ceremonies so characteristic of all but ultra-modern agriculturists. Naturally these are complex procedures involving the religious life of the tribe, but often formulae for planting, etc., are interwoven with these rituals. The keepers of these rituals usually select the seed and announce the time for planting. In other words the community is led by experts. Primitive agriculture as it has been observed is a cooperative effort in which the community as a whole participates. Thus the essential part which agriculture has played in the growth of culture is attributable not merely to the fact that food is thereby provided but also to the fact that humanity itself has been more closely knit and disciplined by the procedures involved.

CLARK WISSLER

See: IRRIGATION; MIGRATION; NOMADS; CULTURE; ANTHROPOLOGY.

II. AGRICULTURE IN ANTIQUITY AND THE MIDDLE AGES. The earliest historical information, as distinct from anthropological evidence, that we have on the subject of agriculture comes from Egypt and Babylonia. These two countries were areas of civilization along the banks of rivers. It was the Nile that made agriculture possible and this in turn was the foundation of Egyptian civilization. Wild barley grew in the district, and the periodic flood of the river invited its cultivation. Wheat (or spelt) was probably almost as important. Once a year the Nile overflowed its banks, covering the land for about six weeks and depositing a fine fertilizing silt. Then the waters flowed back again in October, leaving the land moist throughout the winter with but little evaporation. With this one dose of water, grain could be cultivated with great success. Only near the mouth of the Nile was water stored for further use or for second crops. Out of this crop situation came an agricultural state with a presiding agricultural deity, an agricultural calendar and a technique of cultivation that was relatively high. Nature had laid the foundations so successfully that in mediaeval and early modern times even misrule, mismanagement, warfare and general disorgani-

zation did not wholly destroy the system.

The Babylonian civilization was also built upon irrigated agriculture. The Tigris and the Euphrates, however, were not like the gentle, dependable Nile. Their waters came with a rush and had to be pent up for future use, since the flood occurred in May. Out of the elaborately constructed basins the water was then allowed to flow by degrees to satisfy the land otherwise baked by the midsummer sun. Unfortunately the deposits of the flood were neither so fine in quality nor so wholesome in chemical composition as those of the Nile. But parts of the land were of tremendous fertility and needed only water. Here, as in Egypt, a crude plow drawn by oxen was used and the same kinds of grains were planted. Although there are fewer sources for a study of Babylonian agriculture than of Egyptian, still there are pictorial representations and inscriptions of great value. The Code of Hammurabi shows the dominance of land cultivation, while an Akkadian tablet of precepts provides us with details of the technique of agriculture. The land not only had to be irrigated but also manured.

Among the Greek states a non-irrigated system of agriculture prevailed. Of this we get glimpses from Homer and more detailed information from Hesiod, Theophrastus (*Plants*, bk. viii) and Xenophon. It would seem that a fallow system of extensive agriculture was followed in favorable locations by a somewhat intensive system of cultivation, in which grapes, olives and figs played a dominant part. Greek methods spread to third century Egypt, probably to Carthage and certainly to Italy.

We know not a few details about the methods of carrying on agriculture in the village of Philadelphia, in the Fayum, Egypt, settled largely by Greeks in the third century B.C. (see Rostovtzeff's *Large Estate in Egypt*). Originally a sandy stretch, it was reclaimed by irrigation until it could produce two crops a year—one by the flood of the Nile, the other by artificial elevation of the water. We know that some of the land was left fallow, possibly to eliminate weeds. Oil plants, hay and wheat were the chief field crops. Grapes were grown and wine manufactured. Beer and honey were produced for sale. Melons, pumpkins, onions and garlic were the chief vegetables. Cattle, horses, donkeys, sheep, goats and fowl were raised. A surplus of cheese and wool was available for sale.

In general it may be said that with the cessation of nomadic agriculture, that is, when men

settled down in permanent villages, field work was combined with animal husbandry and the plow was hitched to some beast of burden. The land was kept clean, and moisture was conserved by fallowing a large part of the tilled area. At a later stage a leguminous plant was used in rotation with fallow and a cereal crop. Such a plant adds to the nitrogen content of the soil and, when plowed into the soil, improves the tilth. In all probability Greece, many parts of North Africa and much of Italy at least approached or entered this last stage.

The early Roman state was built upon agriculture, as was the Egyptian state. But whereas in Egypt the agriculture was based on irrigation, in the Roman lands irrigation was either not used or but slightly relied upon. Until about 200 B.C. the estates were typically small and the cultivators were freemen. In parts, notably in Latium, there was soil exhaustion. Everywhere there was the drainage of man power for the numerous wars. From about 200 B.C. to the time of Christ large slave plantations became the typical agricultural unit. This new development occurred as Roman conquests brought in more and more slaves. Some of the plantations grew wheat as in Sicily and North Africa; others, for example, in the eastern part of Italy, were devoted to animal husbandry; and still others, smaller in size, specialized in olives and grapes. The third period, from the time of Christ to about 200 A.D., saw the large estate with free tenants take the place of the slave plantation. It seems to have arisen through the diminution in the supply of slaves and the recognition of the inefficiency of slave labor. Apparently there was but little change in technical processes. From about 200 to 400 A.D. the free tenants lost their free status, and from about 400 to 800 A.D. these unfree tenants were forced to work on the lord's home farm. This was the manor which arose as a relatively self-sufficing organization at the very time the Roman empire was disintegrating.

For a study of the technique of Roman agriculture we are possessed of invaluable contemporary treatises. And it is a significant fact that almost the first literary efforts of the Romans went into the composition of such treatises. The earliest was written by Cato (234-149 B.C.). What he owed to the Greeks and to Mago, the Carthaginian, we shall probably never know. But most of all he derived his knowledge from experience. He urged the sale of the greatest amount of produce and the

purchase of the smallest amount of goods. Olive oil, wine, cattle, sheep and worthless or outworn slaves were to be sold at the highest price. Varro (116-27 B.C.) wrote a much fuller and a better organized treatise. Tillage, animal husbandry and the raising of fowl, rabbits, bees and fish are all considered. To him it appeared that Italian agriculture was a success but not an unqualified success. Columella, Palladius and other writers followed, but they are of less importance.

The Romans grew barley and wheat but probably neither rye nor oats until late in their history. They used milk but not butter, cheese or beef, at least not to any great extent. Fowl and rabbits were delicacies. Grapes and olives were of increasing importance in the republican era.

The poor results which were obtained by Roman agriculture are probably to be assigned to the use of slaves, negligence in applying manure, clumsy tools, neglect of seed selection and bad rotations. All three forms of agriculture were practised, that is, natural husbandry (in spots), the fallow system and legume rotation. The emphasis which is put upon legumes by Varro, Pliny and Columella is significant. Virgil in his *Georgics* describes a legume rotation made up of legume, grain and fallow. He advocated the burning of the stubble on barren soils, cross plowing and seed selection.

When the Roman Empire disintegrated, barbarian peoples rose upon the ruins. The Celts of southern Gaul had an advanced system of agriculture, while their fellows in Britain were more primitive. In Britain cattle raising seemed to have predominated in Caesar's time, and by about 360 A.D. grain growing was sufficiently developed to provide a surplus which was occasionally sent to the Rhine district. It is difficult to determine the nature of the purely Celtic plow. There is much uncertain conjecture as to the practises of the Celts in plowing or digging their fields. It is reasonably clear that their cultivated plots were rather small and tolerably square. For the study of this subject Captain O. G. S. Crawford has recently opened up a new method through aerial photography. He began his work in the chalk downs of Hampshire after the Great War. The villages of the Celts were so often elongated, strung out along a street, that Meitzen and others have considered this a racial or national characteristic.

Whether the village of the barbarian peoples, the Celts, Teutons and Slavs, was originally free or servile, public or private, has long been

a matter of dispute. The issue came to be bound up with that general conflict between the Teutonists and the Romanists which in modified form still continues. But we have now reached a somewhat middle position that seems to be in keeping with the evidence. This position is that, while the normal development was from a public village of free men owning a share in the land and rights of pasture and cutting wood, there was also a very different development out of the large private estate of slaves possessed by military leaders. These two radically different institutions, the former abundantly illustrated in Teutonic lands, the latter in Roman provinces, both resulted in the manor. While the free village had only to add a home farm, the private state, starting with the home farm, had only to add tenants cultivating lands of their own.

Under the leadership of Meitzen it has been thought that agricultural communities took form according to racial or nationalistic tendencies—that the Celtic village was a street settlement, the Teutonic a central irregular cluster of buildings with lands on all sides, and the Slavic a more regular and somewhat roundish array of buildings, access to which was through a single road that ran into the village as a blind lane. There is evidence for these views, but the tendency of recent scholarship is to emphasize local physical characteristics.

Just as the manor developed in the period up to 800 A.D. in Italy and the Roman provinces, so following that date it arose in the northern and western part of Europe. By the thirteenth century it was at its height, and by 1350–1500 it was declining rapidly in such parts as England and northern France. In Germany and Russia decline came much later.

In a general way the technical agricultural development was pretty much the same in northern and western Europe as it had been in Mediterranean lands. After natural husbandry came a fallow system which in places rose to the height of a legume rotation. The technique which was found most commonly in the period 800–1300 was the fallow system. The village area was divided into arable, pasture, meadow, woodland and waste. The arable was cultivated with a twofold or threefold rotation called the two-field and three-field systems. Of this latter system we have most information, partly because it was apparently most prevalent and partly because it lasted in many lands down to the nineteenth century.

In the three-field system there was one field left fallow, one devoted to a winter grain (such as wheat or winter barley) and one to a spring grain (such as barley or oats). Small amounts of beans, peas and vetches were also planted with the spring grain. And there were combinations of cereals such as mancorn or mistlin (wheat and rye, or wheat and winter barley), drage (barley and oats), and brotcorn (sometimes barley, peas and vetches). Since the different grains did not ripen at the same time, there were objections to such combinations.

Weeding was practised, as was manuring. In the thirteenth and fourteenth centuries about two bushels of wheat were sown to the acre and the net yield was about six to eight bushels on average soil. Plowing was not deep nor was the furrow turned right over. Seed was not selected, although it was often brought, at least by manorial lords, from other manors. The field operations were subject to the control of the manorial tenants under the guidance of the lord's officials, meeting together in the manorial court.

The two or three fields were big open stretches; hence the term open field system which is applied to the cultivation. Each field was divided into small sections called shots or furlongs which were in turn made up of small ribbon-like strips of one quarter or one half acre in size. Commonly these strips were not straight but like an "s" somewhat drawn out, a condition said to be due to the necessities of turning a plow team. The shots or furlongs probably represented a section which had been brought under cultivation at one time, each of the tenants, and sometimes the lord, having one or two strips in it. Indeed the shots were often the most important units of the land, since they bore an individuality and had a name.

The lord had a home farm of varying size, part of it in open fields and part of it often set aside, sometimes by enclosures. To him belonged special control over the pastures, which ordinarily were common, and over the woodland, which supplied timber, firewood and mast for pigs. To some scholars the distinguishing feature of the system of cultivation is the permanent separation of arable, pasture and meadow. A piece of land once set aside for one purpose was likely to be kept to one use. However, after the crops had been harvested, the livestock were allowed to feed on the stubble, either watched or fenced in by improvised hurdles. And after the hay had been cut the

meadow was turned over to pasture—until the next year.

In animal husbandry there was little selection of sires and no segregation. Promiscuity and community of diseases resulted. The murrain (a general term) and pox were terrible scourges; copperas, verdigris, quicksilver and oil were used to counteract them, and also pitch or tar. Sheep's milk and cow's milk were made into cheese. Butter was less used in the Middle Ages than now. Pork was more highly prized than mutton or beef. Sheep were raised for wool, and cattle for draft purposes and for milking.

Agricultural equipment was very restricted in the Middle Ages. There were the spade and mattock, the plow and the flail. The well made plow had a wooden beam, iron share, iron colter, handles, wheels or foot irons and a yoke. It was drawn ordinarily by oxen, from two to eight in number. The cart was a wooden affair equipped with harness and a ladder, all of purely local manufacture.

Labor on the manor was normally unfree and ineffective. The laborers, that is, tenants of the manor, often had to be amerced for bad work and were always watched to keep them from stealing. For their labor they received allowances of grain, meal, pigs, lambs, cheese and ale. These helped to eke out a livelihood, which was none too good, from their own holdings of from five to thirty acres. Without their pasture rights they would have been pretty close to the line of mere subsistence. As it was, if they added some home manufacturing of cloth or wooden utensils for sale, they were in a fair position.

Improvements were attempted here and there by manorial lords. Walter of Henley's *Husbandry* is clear evidence of intelligent management. But the dead weight of an unintelligent peasantry made improvement difficult. The probable shift from a two to a three-field system was an improvement. With less plowing there was more land for grain. There is some local evidence of a slight increase in yield per acre. The addition of a legume to the round of fallow, winter grain and spring grain was an improvement which, however, was neither common nor persisted in. Some exhaustion occurred locally, but there seems to be no general evidence of soil depletion or fouling.

The advent of a manorial system imposed upon free villages may have forced the villagers to make better use of their time, since they had to work for the lord as well as for themselves. In some instances it set up a better ex-

ample of cultivation, and it also led to restraint in use of both pastures and woodland. The monasteries, priors and bishops were probably the most enlightened lords, but after about 1350 in western Europe they probably contributed much less than formerly, and they are thought by some to have become more conservative than lay lords. Towns took their places as the dominant influence of the day. Peasants escaped to the towns to become free and engage in varied occupations. Those who remained could the better bargain with their lords, at least for a period.

N. S. B. GRAS

See: IRRIGATION; SLAVERY; SERFDOM; LATIFUNDIA; COLONATE; VILLAGE COMMUNITY; MANORIAL SYSTEM.

III. THE AGRICULTURAL REVOLUTION IN ENGLAND. Village farms are peculiarly adapted to groups of settlers living in a thinly populated country, hemmed in by forests and constantly exposed to attack. In England, as in the rest of Europe, the characteristic form of agricultural organization was that of the manorial system, essentially groups of village farms. Isolated from one another, each community was necessarily self-sufficing, and for mutual protection gathered in clusters of houses, surrounded by meadows, tillage and pasture. Common arable cultivation safeguarded them against extremes of bad farming and secured continuity of practice. Common grazing rights maintained the livestock, which provided plow teams, manure, meat, milk and clothing. Common rights in adjacent woodlands supplied timber for building, fencing, implements, utensils and firing. Farming was for subsistence, not for profit. The system flourished in the conditions which gave it birth. As England became populous and industrial, changes were inevitable. Markets arose; means of communication improved. Cultivation for local consumption ceased to be the necessary basis of agriculture. Differentiation of employment and specialization of production developed. Individual tenancies multiplied. Continuous grain growing on the area occupied by each community, however unsuitable the climate or soil, was necessitated by farming for subsistence. But agriculture gained when the uniformity and rigidity of the old system were supplemented by the greater diversity and elasticity of the new.

The movement toward individual use of land began long before improved methods and resources demanded the removal of village farms

as obstacles to productivity. Many causes hastened its advance. Under Edward I manorial organizations reached their highest administrative efficiency and the servile status of villeins its most precise legal definition. Yet both were changing their character. Land became a source of profit rather than of power, and money was more necessary than retainers. Hired labor was supplanting forced labor on the lord's demesne and rents or wages in cash were displacing personal services as the nexus of new relations between landlord and tenant or employer and employed. Feudalism retained the splendor of its superstructure, but its foundations were decaying.

Individual tenancies were created by enclosures, which began when manorial lords withdrew their demesnes from village farms, fenced them in compact blocks and cultivated them by the services of their tenants or, when these services were commuted into cash, by hired wage labor. Fresh land, brought into cultivation from woodlands, wastes and commons, was generally added to demesnes or let in separate holdings to individuals. By common and statute law such lands belonged to manorial lords, in whose grant or sufferance, in legal theory, originated all commonable rights enjoyed by tenants of arable holdings. If these obligations were satisfied, they could enclose the surplus. Nor did enclosures of this type necessarily cripple village farms. Sometimes they even helped to meet new needs. Agrarian partners agreed to enclose closes from tillage, convert them into pasture and regulate their use. Such treatment only palliated widespread difficulties. Continuously cropped for grain, insufficiently manured, inadequately relieved by weed infested fallows, their arable was wearing out. The only remedy was to lay exhausted tillage to grass and plow corresponding areas of pasture. That cure was unattainable by village partners. Small holdings of fifteen arable acres ceased to yield livings; but the services attached to their tenure remained. This decreasing fertility aggravated the effects of the Black Death and other disturbances of the fourteenth and fifteenth centuries.

Traveling eastward over Europe the Black Death reached England in August, 1348, and destroyed nearly half the population. Wide tracts of land lay uncultivated without tenants or laborers. Although the government endeavored to compel all who practised husbandry to work on the land at the wages of 1346, relations

of supply and demand proved stronger than legislation. The Statute of Labourers (1350-51), frequently reenacted, failed to prevent the natural consequences of the Black Death. As an agricultural organization the manor was shattered. Individual holdings were multiplied and enlarged; the emancipation of serfs proceeded rapidly. Unable from scarcity or cost of labor to farm their demesnes, landowners leased them in separate tenancies. On village farms substantial partners took up holdings vacated by occupants who had died, fled or purchased licenses to be exempted from occupying lands. Many bondsmen escaped; many were manumitted as offerings to avert God's anger; many made their occupation of land conditional on personal freedom. Even the statute assisted emancipation. By recognizing the prior claim, but not the exclusive title, of manorial lords to the services of bondsmen, it conceded some liberty of movement. So long as the law sanctioned personal servitude, it menaced a mass of the rural population. In the Peasant Revolt of 1381 they demanded the abolition of villeinage and attempted to destroy manorial court rolls, because they registered their status as well as their titles. Though the law still threatened their liberties, the servile tenure was fast losing its practical meaning, mainly because feudal landlords abandoned patriarchal farming for rent receiving.

Village farms stood outside modern developments. Relics of primitive society, their framework remained for centuries unaltered. But their subsistence farming was becoming obsolete. From the Tudors onward commercialism permeated national life. It invaded agriculture, which reorganized itself on a money basis. Land passed to new landlords who required profits. An ominous growth of land speculators appeared. Separate tenancies, large enough to encourage enterprise, had proved their value. Occupying owners and capitalist farmers increased their holdings by absorbing those of smaller men. A general movement, following commercial lines, threatened village farms and small independent occupiers. Cloth manufacturers created a demand for wool and made sheep farming more profitable than corn growing; hence large tracts of fenced pasture were needed. Small occupiers were the easiest and chief victims. Tenants at will were evicted; leaseholders or copyholders were bought out or compelled by exorbitant rents or fines to surrender tenancies.

Village farmers, however, were better protected. Mutual rights of common rendered it difficult to dissolve partnerships without agreement. But if coercion or persuasion secured consent, arable fields were laid to grass and thrown into sheep runs. Consolidations of small separate tenancies assisted enclosures for pastoral farming to depopulate rural districts and replace hamlets by solitary shepherds. Alarmed by the "decay of people" and fearing scarcity of bread, Tudor governments passed numerous acts forbidding conversion of tillage to pasture, ordering newly laid grass to be plowed, directing removal of enclosures and rebuilding of decayed houses, limiting the farms or flocks which one man could hold, imposing penalties for disobedience. Legislation was comparatively ineffective, partly through evasion or lax administration, partly from the futility of forcing men to grow grain on exhausted arable. By 1560 the enclosing and engrossing movement had spent its revolutionary violence.

A transitional period, the sixteenth century depressed the lower and raised the middle classes. It severed small occupiers from the soil, leaving them dependent on wages. But yeomen prospered on enlarged holdings and leaseholders and copyholders secured tenures for life or lives. Agriculture progressed slowly. Enclosures of separate tenancies in compact blocks prepared for advance; except as restoratives, conversions of tillage to pasture were retrogressive. Yet throughout the sixteenth and seventeenth centuries writers advocated changes which, under George III, revolutionized British farming. The first original work on agriculture printed in English was *The Boke of Husbandrye* (1523) by John Fitzherbert. Writing from forty years' experience Fitzherbert urged the advantages of farms in individual occupation divided into separate enclosures, and advocated mixed husbandry in which stock and corn assisted each other. Thomas Tusser followed with *Hundreth goode pointes of Husbandrie* (1557), expanded into *Five hundreth Points of Good Husbandry* (1573). Like Fitzherbert he suggested no new resources, and neither had traveled outside England. Barnabe Googe was both translator and traveler. His *Fourre Bookes of Husbandrie* (1577), mainly translated from Heresbach's Latin work, urged the introduction from the Low Countries of turnips and artificial grasses. Other writers followed Googe, notably Sir Richard Weston, whose *Discours of Husbandrie used in Brabant and Flanders* (1645), pirated by Hartlib, was

printed in 1651 as *Samuel Hartlib his Legacie*. The book contains the "Large Letter" of Robert Child. Book farmers suggested many improvements besides turnips and clover. Thus John Forster (1664) urged potatoes as field crops. Sir Hugh Plat, in his *Jewell House of Art and Nature* (1594), Walter Blith and Child collected imposing lists of manurial substances. Plat recommended putrifying pilchards and Child mentions that New England farmers used on the land a fresh-water fish called "the Ale-wife because of its great belly." Drainage was sensibly discussed by Walter Blith (*The English Improver*, 1649), who enforced his arguments by references to the Scripture, and between 1630 and 1649 a large area of the fens was reclaimed. Drilling of grain, instead of broadcast sowing, was advocated by Plat and Gabriel Plattes, "the Corn-Setter," and both Maxey (1601) and Worlidge (1669) invented machines for the process. Livestock was neglected. Thus Worlidge, whose *Systema agriculturae* (1669) was popular, devoted three pages out of 217 to "beasts." In every other direction useful suggestions for agricultural improvement were made. Despising book farmers and distrusting promises, successive generations of agriculturists waited for ocular demonstration.

By 1700 turnips were cultivated in Norfolk and Essex, and Andrew Yarranton (*Improvement by Clover*, 1663) induced Worcestershire to use clover on "ryelands" exhausted by long tillage. But their cultivation was local. Even the genius of Jethro Tull failed to convert Oxfordshire and Berkshire to turnips, clover or sainfoin. French vine culture taught him to sow crops in rows and to keep his land clean and stirred. He perfected a drill, drilled corn and turnips, kept hoes going and grew heavier crops more cheaply than his neighbors. His *Horse-hoeing Husbandry* (1731), to which Queen Caroline subscribed, embodies his researches into plant life and the essential principles of scientific agriculture. Farming on his system became a fashionable pursuit among great landlords like Charles, Viscount Townshend, who retired from public life in 1730 and set himself to improve his Norfolk estates, revived the obsolete practise of marling, introduced turnips and clover into field cultivation, initiated the four-course rotation of cereals, roots and artificial grasses, drilled wheat and turnips, kept more stock and verified the maxim that "a full bullock yard and a full fold make a full granary." His zeal for roots gained him the

name of "Turnip Townshend," although outside Norfolk turnips were still classed with rats as Hanoverian importations. To make the movement general some stronger impulse was needed than example. It came from the growth of population.

With the reign of George III began the industrial revolution which transformed the distribution of population and wealth, as well as the face and life of the country. In 1760 agriculturists numbered two thirds of the total population, and their income exceeded half the national revenue. In 1928 landowners, tenants and laborers had dwindled to a tenth of the population and their income to a tiny fraction of the whole. Population shifted from the south to the northern coal and iron fields. While implements of production remained simple, agriculturist and manufacturer shared many businesses; machinery applied to production sharply differentiated them and made them mutually dependent. Large factories absorbed domestic industries and small manufacturing centers concentrated their workers in towns and created huge markets for food. Meanwhile the standard of living rose. In 1760 the mass of the people consumed rye or oats and rarely tasted fresh meat; the new population demanded white wheat bread and fresh beef or mutton.

Roots and artificial grasses increased the yield of grain crops; they also supplied the winter keep which facilitated improvements in livestock. Hitherto cattle were valued for milk or draft and sheep for wool; neither was studied as meat producers. Robert Bakewell, of Dishley, Leicestershire, revolutionized the science and art of stock breeding. He succeeded best with New Leicestershire sheep. But according to his principles and methods other breeds of sheep and cattle were rapidly improved for specialized purposes. In average weight beef cattle rose from 370 pounds in 1710 to 800 pounds in 1795, and sheep from 28 pounds to 80 pounds.

Large scale production cheapened manufactured produce. Arthur Young applied the principle to agriculture. He contended that factories for food needed capitalist landowners and large farmers on long leases. Young's doctrine met with instant success. Landowners like "Coke of Norfolk" spent millions on equipping farms with houses, buildings, roads and fences. Their estates proved their best investment. Tenants, possessed of capital, adopted recent improvements, carried more stock, employed

more manure, grew heavier crops and with rising prices profited by long leases. Davy's lectures embodied in his *Elements of Agricultural Chemistry* (1813) marked the union of "Practice with Science." But population pressed hard on production. Under corn laws which encouraged exports or prohibited imports when prices were above or below fixed levels, exports of home grown grain (1697-1801) exceeded imports by 11,000,000 quarters. After 1792 England ceased to export grain. Throughout the French wars (1793-1815) the corn laws were continuously suspended and foreign imports encouraged. But the quantities obtainable were infinitesimal. Stimulated by famine prices, every available acre was cultivated for bread, and the system of landlord, tenant and worker was almost universally established. Accordingly, in 1841, 16,500,000 people were fed from home grown food and England set Europe an example in farming.

In this industrial transformation village farms perished. When the Tudor revolution exhausted itself, enclosures proceeded slowly until under George III they again advanced with revolutionary rapidity. Behind both movements the driving force was industrial progress. Tudor governments opposed enclosures for wool because they threatened depopulation and bread scarcity. Hanoverian legislators encouraged enclosures for grain growing and stock feeding because they increased employment and averted famine. Demands for food necessitated maximum productivity. But village farmers could not introduce roots and grasses on open fields which after harvest were grazed in common, rest their exhausted arable, vary its cropping or grow fodder for their half starved stock whose scanty manure was wastefully distributed. The mediaeval system hindered food production. From the north, west, southwest and southeast it had almost disappeared. But it still predominated in Yorkshire and the midland, eastern and southern counties. Between 1760 and 1820 at least 4,000,000 acres of common meadow, arable and pasture were enclosed by acts of Parliament and redistributed as farms in individual occupation, owners being awarded compact freehold blocks equivalent in value to their scattered strips and common rights. Leaseholders for life, copyholders by inheritance, squatters with twenty years' occupation, were treated as owners. Rent paying occupiers and settlers near common pastures or wastes received nothing for the loss of cow

keeps, poultry runs or firing. When factories absorbed domestic industries, thousands thus became exclusively dependent on agricultural wages. The same loss of supplementary earnings forced small holders to sell their awarded freeholds and share their fate. Landless laborers, pauperized by high prices, low wages, ill judged poor laws and the financial collapse which followed the peace of 1815 sank during 1815-36 into a dependence from which allotments, cottage gardens, small holdings, the franchise, free education, old age pensions, health insurance and wage boards are slowly raising them.

ERNLE

See: VILLAGE COMMUNITY; MANORIAL SYSTEM; ENCLOSURES; BLACK DEATH; AGRICULTURAL SOCIETIES; CORN LAWS; AGRICULTURAL MACHINERY; ALLOTMENTS; SMALL HOLDINGS; WORLD WAR; AGRICULTURAL POLICY.

IV. AGRICULTURE ON THE CONTINENT IN MODERN TIMES. The opening of the modern era about the turn of the fifteenth century, with its inauguration of thoroughgoing changes in many spheres of economic activity, influenced agriculture in a relatively slight degree. To be sure, signs were not lacking that agriculture was seeking new paths, but they were confined to areas distinguished by special fertility and located in the neighborhood of flourishing cities. Districts thus favored existed in northern Italy, in the Rhine country, in Flanders and Brabant and adjoining northeastern France; in other words, wherever the presence of economic and natural prerequisites made agriculture indistinguishable from horticulture. As early as the sixteenth and seventeenth centuries these districts seem to have practised some form of crop rotation, meadow cultivation, proper fertilization and working of the ground. Apparently the country households of a city aristocracy were active there in promoting progressive agriculture. We know, for example, that the first great lowland dikes of the sixteenth and seventeenth centuries were traceable to city initiative. The agricultural writers of the time—Joh. Baptista Porta, Agostino Gallo, Tatti, Tanara, Tarello, Bussato in Italy, Olivier Serres in France, Fitzherbert in England, Joh. Colerus in Germany—addressed themselves especially to this circle of agronomic amateurs. In Germany works of these early writers are known as the *Hausväter-Literatur*, in England as “books of husbandry,” a title by which they are pertinently characterized. They are encyclopaedias of

household management, practical handbooks for the master or the mistress of an aristocratic household. Domestic accomplishments such as cooking, baking and preserving are treated with the same thoroughness as agriculture proper, horticulture or the care of animals. Recipes and household remedies against disease are recommended. Considerable space is given to moral and religious observations.

But the large mass of the rural population was untouched by this growing body of knowledge. Most farms were still in the traditional two-field, three-field and field grass stages. Cultivation was extensive, and although the soil was fertilized the supply of animals was as a rule inadequate both in quantity and in quality. The lack of a ready market for agricultural products checked for a time all further development. The masses of the people still lived in the country and produced on a small scale what was necessary for their sustenance. The few cities then existing were small, and their inhabitants likewise produced most of their food in their own households; the type of townsman of that day, even in the larger towns, was the agricultural townsman, *der Ackerbürger*. To be sure, weekly markets were held in the towns, to which the country people of the neighborhood sent their goods; and, following the cumulative development of international trade, a constant stream of easily transportable agricultural produce, such as wheat, wool, cheese and dyestuffs, passed through the seaports. However, only relatively small quantities found an outlet in this way; the possibilities of sale offered no stimulus toward making the industries capable of increased marketable yield through improved agricultural technique. When in the Rhine country, in northern Italy, in France and other regions of early commercial development the old manorial organization had become obsolete, its dissolution took place gradually, not as a result of the substitution of capitalistic agricultural enterprises for the servile peasant family farm, but because money payments supplanted payments in kind. It has been repeatedly stated that the noble and other manorial estates in the Slavic colonial regions, opened up by Germany (east Germany, the Baltic Provinces, Poland, etc.), early exhibited capitalistic enterprise on a large scale. The statement is based on the fact that, in view of the standards of the times, there was a not inconsiderable wheat export from that region and the inference is sound to the extent that these eastern estates

did indeed represent the germ of a later development into large scale economic enterprises. But originally and for several centuries they too were a part of the system of small scale economy for supplying immediate needs. The fact that because outlets were lacking in these thinly populated districts a certain residue was made available for export, did little to change the situation. Even when an outside wheat trade was organized, production itself with its small scale technique was hardly affected by it. Operations on a large scale in early times are found only in itinerant sheep raising, which was developed in Spain (Mesta, *q.v.*), in Italy and in Greece (Mandra, Dogana, Transhumanz). But this is not to be regarded as an evidence of agricultural progress. On the contrary, it represented a backward step to a capitalistically disguised nomad economy, which hampered more than it furthered the agricultural development of the countries concerned.

The transition in agriculture from the production for immediate needs to production for sale was accomplished with lasting effect only in the second half of the eighteenth century. The strongest impulse in this direction obviously came from an expansion of the market for agricultural products. Mercantilism (*q.v.*) brought with it the development of industry and growth of cities, which led in their turn to an increase in population. The demand for, and the price of, agricultural products rose. Traditional agriculture was not equal to the claims made upon it. The system, employed for a thousand years, was felt to be obsolete, and it was widely believed that agriculture had reached its lowest ebb. This view was valid in so far as the increased demand for agricultural products had led to robbing and exploitation of the soil.

With intense unparalleled energy all the world, led by its rulers, became absorbed in agrarian questions. A wealth of literature was produced, different from the old husbandry books and specifically agricultural and economic in character. Learned societies were formed in the universities with a view to promoting agrarian progress. The problem to be solved presented itself then in the following terms: How could agriculture be freed from traditional and outworn methods of grain growing (based on the primitive field system) and be made more profitable by improvements in stock farming and by the introduction of new plants for cultivation? The start had to be made by increasing and improving the cattle,

for this would supply the chief instruments of production for the new agriculture. The countless difficulties which any such reform would encounter at this stage of agricultural organization are clear. For the most part the fields lay indiscriminately scattered over the village common without being individually accessible. An essential part of this system was the *Flurzwang*, which compelled all cultivators to sow and reap simultaneously, on the day and week decided upon by the community. To cultivate new plants, with varying periods for sowing and reaping, was as impossible for the individual peasant as to cultivate fallow land. But in order to increase the working capacity of cattle and their manure production it was absolutely indispensable to cultivate new fodder plants for the better nourishment of the animals. For in regions other than those naturally provided with grass their nutrition was in a wretched state. Any planned fodder management was still lacking. For nourishment the cattle were in the main restricted to pasturage on the far side of arable land. This pasturage, being communal property, was in the worst conceivable condition.

Hence all progress depended upon success in freeing agriculture from the fetters of collectivism. Only if the farmer became free to make his own decisions was a rational high yield economy feasible. This was the objective held in view. Soon it appeared that the nearer the farm approached the optimum size dictated by economic considerations, the more feasible was progress on the technical side.

England at this time enjoyed certain advantages, as compared with the continent. In connection with the enclosures there had developed a system of large scale leaseholding based on tenant entrepreneurs and divorced from any mixture of patriarchal elements. By the eighteenth century agricultural technique here had developed to such a degree that it was regarded as a shining example by continental contemporaries who sought to emulate it. In France they were filled with enthusiasm for replacing the manorial, small tenant economy by large leaseholds according to the English pattern. In this way, on the basis of *grande culture*, they hoped to win a place in the sun of rising capitalism for the landed aristocracy, which had become entirely estranged from any agricultural activity of its own as a result of substitution of payments in money for feudal dues. This agrarian program found its economic philosophy in the physio-

cratic doctrine which sees the source of all wealth in the *produit net* of agriculturally exploited territory and hence looks upon large holdings, administered by wealthy entrepreneurs, as the desirable unit of cultivation. Development in this direction, however, was almost completely blocked by the radical way in which the revolution disposed of feudalism. That France remains a country of preponderantly small peasant holdings is due to the revolution itself and to the Code Napoléon, which provided for the distribution of the commons and permitted the division of real property.

When in eastern Europe feudalism disappeared in the early and middle years of the nineteenth century, the economic foundations of agriculture were at first left undisturbed. But afterwards, as before, the small peasant holdings were worked almost exclusively to meet individual needs and to support the landed aristocracy which, generally speaking, was itself not agriculturally active. No attempt was made either to abolish collective controls or to interfere with the age old, minute division of land to which the Slavic peasants were accustomed. Even when in the seventies Russia and Rumania developed into grain exporting countries there was little change in that respect. The agrarian reform had left the peasant's acute craving for land unsatisfied. To still that hunger he was compelled to resort to additional leasing and was ready to raise export grain for the large landowner under the form of share tenancy; either he gave up half his harvest as compensation for the leasehold or he worked an area equal to his own for the landowner during the whole agricultural year. In this situation no compelling incentive was offered to improve and intensify production. Notwithstanding a constantly increasing grain export quota before the war, east European agriculture remained extensive in character. In Russia the retention of the common village field contributed likewise toward checking agricultural development—the *obshchina* was a truly communal institution with periodically recurring distribution of arable land. Stolypin's agrarian reform of 1906, which sought to effect a change in this, could not be completely worked out before the World War.

Germany had a different development. Here, as in neighboring Denmark, the dissolution of the manorial system was planned in advance and effected with a view to uncovering new opportunities for agricultural development.

The landed proprietors had begun as early as the eighteenth century to dispense with certain restrictions on agriculture. But full opportunity for development was given only at the beginning of the nineteenth century by the so-called emancipation of the peasants, which abolished the various forms of dependence on an overlord, along with the remnants of the former collectivism. Of course there was little change in the situation then existing in localities like the Rhine country, where already in the Middle Ages manorial rights had been commuted into a conglomerate of rent charges, and where consequently there had developed an economically independent, small peasant agriculture which resembled the regime in neighboring France. The similarity was further strengthened by the fact that the region retained the French inheritance law introduced during the short lived Napoleonic regime. Yet the disadvantageous consequences which may otherwise occur in small scale agriculture were absent here as well as in the adjacent countries, Belgium and the Netherlands. Small scale agriculture is not in every instance obsolete. It is adequate to certain claims made upon it—as, for example, in the valleys of the Rhine and its tributaries, where the trade situation is favorable and where specialized intensive cultivation of wine, flowers and vegetables, as well as intensive stock farming, can be carried on.

Thanks to the way in which the dissolution of the manorial system was connected with the consolidation of intermixed strips into compact plots and with the distribution of communal property, the rest of Germany and Denmark succeeded in establishing peasant holdings and independent farms that were efficient even as to size and shape. The existence of such farms led to the appearance of efficient agriculturists, genuine entrepreneurs capable of organizing mass production in agriculture. For Thaer, whose name is indissolubly associated with the history of German agriculture in the first half of the nineteenth century, agriculture was an art of obtaining the highest possible net yield by procedures based on calculation and observation. He founded the first higher agricultural school in Germany and, stimulated by study of English agriculture, succeeded in introducing annual rotation of straw and leaf crops. Apart from the favorable consequences for plant growth this rotation led to an increasing emancipation of agriculture from the one sided predominance of grain cultivation. The earlier

agriculturist, bound hand and foot by tradition and communal regulations, might farm well or ill according to his ability or industry, but the measure of his own initiative was narrowly limited. On the other hand the landlord of Thaer's assumptions was expected to farm "right" or, in modern idiom, "rationally." The progress that started with Thaer was furthered by Liebig. His teaching disposed of all the mistaken ideas on plant nutrition which survived down to his time. Liebig proved that certain mineral substances were indispensable for plant nutrition, and that if the soil was not to become gradually exhausted it had to be replenished by the direct introduction of the withdrawn mineral substances. The absolute quantity of raw materials was not of importance; what mattered was the presence of *all* the raw materials necessary for the plants. While the introduction of crop rotation and of field cultivation of fodder plants by Thaer gave the agriculturist greater freedom with respect to stock farming, Liebig's mineral theory made him more independent in the production and use of fertilizer. For even though animal fertilizer did not prove to be superfluous to the extent that Liebig had believed, still the farmer was no longer restricted to the fertilizer produced on his own farm. Farms heavily stocked with cattle and with a large fodder output were no more practical than lightly stocked farms, which might through purchases in the market make themselves independent of their own fertilizer production. The farmer was now able to specialize in those branches of agriculture to which his farm was peculiarly adapted by natural and economic conditions. He was also in a position to manipulate his productive activities in such a way as to take advantage of important market fluctuations. This affected most favorably the productive efficiency of the individual farms and of agriculture as a whole.

The history of Germany and of the territories bordering it on the north and west indicates the main line of progress followed by continental agriculture during the nineteenth century. Here lie the regions of most intensive exploitation with the highest expenditure of capital and labor per unit of area. The indices of a high degree of intensive cultivation are especially clear in this region: high consumption of artificial fertilizer and (in connection with it) a high average of gross output; intensive cultivation of hoe crops; and a reduction of sheep in favor of cattle and pig raising.

After the beginning of the nineteenth century continental agriculture was considerably stimulated by the increase in demand for its products due to the growing industrialization of the various countries and concentration of population in the cities. These favorable marketing conditions seemed to be seriously endangered, however, when in the late seventies the development and cheapening of transportation made it possible to bring to the markets of the old civilizations the transportable agricultural mass products—grain and fodder above all—of the countries with the most favorable conditions of production. To shut the door against all foreign imports was impossible, since it would have involved such a serious rise in the agricultural price level that industrial development would then have suffered. Internal production might be subsidized by protective tariffs, but this could not completely eliminate the danger. The farmer of industrial Europe responded to the change in the situation by a decisive reorientation of production in the direction of increased output of animal products. Competition with the products of foreign tillage might be hopeless but need not be so in the case of animal products, which are more difficult to transport. This shift in agricultural production was further stimulated by an increase in demand for animal products, since with growing urbanization meat has come to occupy a larger place in the diet of the mass of the people and meat consumption has grown in greater proportion than bread consumption.

The production of grain, therefore, was completely displaced from its leading position and intensive grazing succeeded it wherever the quality of the soil permitted. But even where mixed agriculture was retained the production of livestock was increased; this was facilitated by foreign importation of certain varieties of fodder. In the last years before the war the value of German animal products was almost twice as high as that of vegetable products. The small countries bordering on the industrial center of Europe—Denmark, Holland, Switzerland—were most strongly influenced by this development. They used their favorable proximity to this center to develop an agricultural export economy with high priced products, mostly animal, for the provisioning of neighboring industrial territories, especially of England. The German farmer also profited, except for a few years of excessively low prices. If we can speak of an agricultural depression, it affected

primarily the east German grain and potato growers. Even they, however, could remain above water because of protective duties on grain and the possibility of using part of their potatoes for the production of alcohol. To be sure, their condition remained unfavorable as compared with that of the farmers of western and central Germany. For the latter not only enjoyed better marketing opportunity—they also had in sugar beet culture a branch of production that fitted precisely into the new economic situation. With the help of migratory labor from eastern Europe these favored farmers produced the raw material for an export industry and utilized the waste products as fodder in animal husbandry.

In summing up, we may repeat that the development of agriculture on the continent shows striking contrasts as regards both periods and regions. The reasons for these must be sought in the general economic development of individual districts and in the manner in which the transition from feudal and collective controls to a free agriculture was effected. The strongest motive force in agricultural progress has always been improved market conditions. This generalization is amply supported by our examination of the early periods in regions of active business and commercial life and is suggested still more forcibly by the nineteenth century developments in central Europe. Although the agricultural production of the industrialized continent was insufficient to meet its own needs in food and fodder, still it succeeded in fitting itself into the international pattern of the agricultural market in a way that furthered its own agricultural development.

AUGUST SKALWEIT

See: MANORIAL SYSTEM; SERFDOM; PEASANTRY; LANDED ESTATES; PHYSIOCRATS; AGRICULTURAL SOCIETIES; AGRICULTURAL MARKETING; AGRICULTURAL MACHINERY; AGRICULTURAL LABOR; PROTECTION; WORLD WAR; AGRICULTURAL POLICY.

V. AGRICULTURE IN THE UNITED STATES. The history of American agriculture from the beginning of the first permanent settlements to the present time has been to a large degree the history of the colonization of a great imperial domain of virgin land and the transformation of farming from a simple, practically self-sufficient, pioneer occupation into a modern business organized on a scientific, capitalistic and commercial basis. As a constituent part of American history closely interwoven with other phases of

the life of the American people, it may be conveniently divided into three periods: first, colonial foundations (1607-1776); second, frontier and plantation (1776-1860); and third, the agrarian revolution and the settlement of the Far West (1860-1930).

The need for land was the impetus for the early colonial foundations; it was "... the master passion which brought the men of the seventeenth and eighteenth centuries across the sea and lured them on to the frontier. Where hundreds fought for freedom of worship and release from political oppression, thousands saw in the great unoccupied lands of the New World a chance to make a living and to escape from their landlords at home." Thus the acquisition of a freehold was the ruling purpose in the settlement of America. Agriculture became the predominant interest of the colonial period. Even those who by occupation were fur traders, fishermen, sailors or merchants generally devoted part of their time to farming.

Land in England during the seventeenth century was held under a modified feudal tenure. Attempts were made in the proprietary grants to transplant some of these survivals to America. The quit rent system met with opposition and resulted in failure. The first settlements were made on the communal basis; but this plan was soon abandoned and individual holdings in fee simple were adopted as the only feasible method of attracting immigrants to the land. Practically every one could acquire land. In New England each settler was granted a certain number of acres as his share in the colony. In Virginia there were three methods of acquiring land: bills of adventure, head right and meritorious service. Land was easy to get and whatever the method of acquisition the grants in all instances amounted substantially to a free gift. In New England the small farm was the rule. The same may be said of the middle colonies, except in the case of the large manorial grants in the Hudson River valley which, however, remained uncultivated until they were broken up into small holdings. In the South large plantations were the rule, the average size of the Virginia estate being about 5000 acres.

The colonial period was necessarily a time of experimentation and adaptation. European plants and animals were acclimatized; and European systems of land tenure and methods of cultivation were adjusted to the conditions of a frontier environment. This was a period of marked improvements in English agriculture.

Turnips, root crops, clovers and cultivated grasses were being introduced. Scientific crop rotation was superseding the wasteful two-field and three-field systems of farming in Europe. The colonists brought with them a knowledge of this experience.

In addition they took their first lessons in American farming from the Indians, from whom they learned the best methods of raising the indigenous crops as well as the most economical method of clearing and preparing the land for cultivation. The colonists were therefore the beneficiaries of a knowledge of plants and animals and of the methods of agriculture acquired by centuries of costly experience both in the Old World and in the New.

Notwithstanding this rich inheritance of agricultural knowledge and practises it was geography after all that constituted the determining factor in shaping the economic development of the colonies, with the result that distinct types of agriculture based on environmental rather than human differences developed. Topography, resources and climate explain the courses of development in New England, the middle colonies and the South. New England was broken by small mountain chains and the arable portions of land were small. This region was adapted to a diversified rather than a specialized system of farming, supplemented by the fur trade, lumbering, ship building and the fisheries. The broad Atlantic coastal plains in the South, on the other hand, with their bays and navigable rivers serving as highways of commerce into the interior and with the illimitable supply of arable land stretching from river to river, and the genial climate, encouraged the dispersion of population and the development of an agricultural civilization based on a high degree of specialization in the production of a few great commercial staples.

Agriculture throughout the colonial period was in a primitive and backward condition. It was fettered by tradition and superstition. Little attention was given to the rotation of crops and to the preservation of soil fertility by fertilization. Since land was plentiful and labor scarce, the colonists economized labor rather than land. Their work was to take possession of the virgin land, to prepare it for cultivation and to select the plants and animals best adapted to the new environment.

The westward movement of pioneer and planter into the Mississippi valley is the dom-

inant fact in the history of American agriculture from the revolution to the Civil War. The occupation of the old Southwest before the revolution and the conquest of the old Northwest by the southern backwoodsmen during the continuance of the struggle marked the beginning of this advance. The Louisiana purchase and the acquisition of Florida followed, thus giving the United States an agricultural empire of vast proportions with a magnificent system of waterways which furnished outlets to the sea. Land hunger attracted the settlers to Texas and "manifest destiny" lured them on into New Mexico, California and Oregon, which were formally annexed to the national domain by the middle of the nineteenth century, while the rapid advance of settlers into this great imperial domain was made possible by the federal policy of land disposal.

The settlement of the Mississippi valley, already begun before the revolution, received a great impetus after the establishment of independence and, although retarded somewhat during the Napoleonic wars, was greatly accelerated after the War of 1812 when westward migration from the older sections of the country and from Europe began to take place on the most unprecedented scale in modern history. By 1860 the eastern half of the Mississippi valley had been added to the settled area, and the frontier had been pushed westward across the Mississippi River to the great plains.

American agriculture during the early part of the national period was a continuation of the types of farming practised in the colonial period. Colonial plants and animals and methods of agriculture were adapted to the new areas reached in the course of westward migration. Grain raising, stock raising and plantation agriculture became the established systems of farming, supplemented by truck gardening and fruit growing. Several types of farming may be distinguished: the frontier industrial unit, the farm and the plantation. The frontier industrial unit consisted of a small allotment of land. This was occupied in many cases by only a single person or a family whose attention to farming was limited to supplying the necessities of life which supplemented the proceeds of hunting and trading, the primary concern of the individual or group being the protection of life rather than the accumulation of property. The farm consisted of a larger unit of land which required the attention of the farmer and his family. The routine was more regular.

Commodities were produced not only for family use but also for the market. Additional help might be required; but such assistance was only intermittent. There was no sharp distinction between the farm owner and his workmen. In the South the farmer might have recourse to hired labor or he might buy a few slaves. The plantation was a comparatively large unit of land the management of which was entrusted by the owner to overseers who directed a labor force of considerable size. There was a high degree of specialization, attention being given largely to the production of one or two staples for the market. Slave labor was the rule; but free wage earners might be employed. There was a sharp distinction between the owner and his workers. These three types of farming might exist side by side; one type might succeed the other in the same locality; or one type might exist independently of the others.

The United States had by 1830 become differentiated into three great economic sections, each section devoting itself more and more exclusively to the production of those commodities for which it was best adapted by nature. New England was becoming a manufacturing-commercial section. Some abandoned farming altogether and migrated to the rising industrial centers, while others were induced to follow Horace Greeley's injunction to "go west." The remainder stayed on the farms. Western competition compelled the New England farmer to abandon grain farming; and the growth of the home market enabled him to turn, in well defined areas, to specialized commercial agriculture such as beef and wool production, dairying, market gardening, fruit raising and, in the Connecticut valley, tobacco growing. Agricultural societies were formed and improved implements and methods of farming were introduced. Agriculture was being transformed from the self-sufficient to the commercial state.

The Northwest, on the other hand, with its extensive areas of woodland and prairie country entered upon a period of rapid expansion and the production of surplus products for the market. A number of new factors contributed to this development, among which may be mentioned: the policy of the federal government which enabled a settler after 1820 to purchase a farm at \$1.25 an acre; the migration of settlers from the East and the Old South and the rapid growth of European immigration in the forties and fifties; the extension and development of water and rail transportation; the invention

and introduction of improved farm implements and machines which were destined later to revolutionize the methods of farming; the growth of markets in the East and South, and also in England following the repeal of the corn laws in 1846; the improved methods of communication, such as weekly and daily newspapers and the telegraph; the rapid growth of the merchant marine; and, finally, the establishment of agricultural societies. The Northwest was becoming the surplus grain and livestock section of the country.

Although the South presented a variety of agricultural types and conditions, the plantation system clearly predominated there. Cotton superseded tobacco as the leading commercial staple. By 1830 cotton had become "king"; no nation has ever possessed such a great monopoly of an essential raw material of industry as the South now came to possess in the case of this staple. Cotton and slavery became the basis of the rural economy of the South. There were variations of course within the plantation system, dependent upon the character of the soil and the labor requirements in the several areas. There were plantations devoted to the raising of cotton, tobacco, sugar cane, rice and indigo. Negro slave labor was well adapted to the production of these staples. There were also many small farms in the several plantation districts of the South; but they were located in the regions of inferior lands which were not so well suited to the plantation system.

There were thus created and established two rival systems of agriculture, the origins of which date back to the beginning of the colonial period: the one democratic with small holdings, diversified farming and free labor; the other aristocratic with large plantations, specialized farming and slave labor. These two systems, based on physiographic and racial differences, though mutually complementary, became engaged in a long sectional contest for the control of the West and for supremacy in the national government.

The Civil War marks the beginning of an economic revolution in the United States which is characterized by two related lines of development, industrial and agricultural. The industrial revolution was the change from hand labor in the home to machine production in the factory; while the revolution in agriculture was the transformation of farming from a type of pioneer self-sufficiency into the scientific capitalistic commercial type.

The factors contributing to the agricultural

revolution were the existence of a vast empire of virgin land and the liberal policy of the federal government beginning with the enactment of the Homestead Law of 1862 in transferring this great heritage from public to private ownership; the rapid increase of population and immigration which supplied the labor force for nearly four and a half million farms carved out of the public domain during this period; the invention and popularization of labor saving implements and machinery and the consequent transformation in the methods of farming; the extension and development of transportation and communication which connected the local markets with the world market; the expansion of home and foreign markets which absorbed the rapidly growing surplus products of the farm; and the establishment and development of various agencies for the promotion of scientific knowledge relating to agriculture, among which may be mentioned the federal and state departments of agriculture, agricultural colleges and experiment stations, farmers' organizations with their economic, political, social and educational functions, and the farm press. By 1914 the transition of farming from the pioneer into the commercial stage was completed. Agriculture became interwoven with the fabric of national economy, giving rise to complex problems of production, distribution and exchange, which were demanding solution as the nation entered upon a period of reorganization and readjustment.

The population of the United States continued throughout this period to be predominantly rural. The census of 1920, however, showed the majority of the American people living in towns and cities, only 48.6 percent of the population being classified as rural. In 1920 the number of persons over ten years of age employed in farming declined to 26.3 percent; while the number engaged in manufacturing and mechanical industries was increased to 30.8 percent. This is a fact of considerable importance in marking the emergence of the United States into an agrarian-industrial state. The number of farms was increased from over two millions in 1860 to over four and a half millions in 1890 and to about six and a half millions in 1920. The average number of acres in farms and the average number of acres of improved land in farms remained fairly constant throughout the period. Meanwhile increased land values were reflected in the growth of tenancy. The number of farms operated by tenants in-

creased from 25.6 percent of the total number of farms in 1880 to 35.3 percent in 1900 and to 38.1 percent in 1920. These figures tend to show that the proportion of farms operated by tenants had become somewhat stabilized during the first two decades of the twentieth century.

The areas described by the familiar terms "corn belt," "wheat belt," "dairy belt" and "cotton belt" became practically determined during this period. In an area lying northeast of a line drawn approximately from the mouth of Chesapeake Bay to the northwest corner of Iowa, the agricultural population had rather definitely devoted its energies to the production of dairy products, truck, potatoes and fruit on the basis of domestic market demands. To the southwest of this line the area including most of the states of Ohio, Indiana, Illinois, Iowa, Missouri and portions of a number of bordering states was devoted to the raising of corn and the production of meat animals, depending for the most part on a domestic market but disposing of some 15 percent of its pork products on the foreign market. To the west and north of the corn belt was the wheat belt, one fifth of whose product was dependent upon a foreign market, while the remaining four fifths were used to supply domestic demands. In the South, where cotton farming had occupied an important position for a long time, about one half of the production was shipped abroad to the industrial centers of Europe, while the other half was consumed in domestic markets.

The passing of the public lands was accompanied by significant changes, which characterize American agriculture in the twentieth century. Among these changes may be mentioned: the rapid rise in land values and the consequent transition from extensive to intensive farming; the decline of agricultural exports due to the tariff policies of European countries, the development of other sources of supply and the growth of the home market; the utilization of inferior lands by irrigation and drainage; and the reorganization of rural life which broadened the farmer's outlook, brought him into contact with the business world and awakened in him a realization of his educational needs and opportunities.

These changes are all of a permanent nature. The principal agricultural problem of the present is therefore one which calls for a fundamental and thoroughgoing readjustment of the farmer to his changed economic environment. It appears that the foreign demand can no longer

be relied upon to absorb the exportable surplus at prices generally remunerative to the farmer; and that consequently the prosperity of the farmer depends very largely upon the growth of the domestic non-agricultural population for the creation of a market which will absorb at profitable prices practically the entire domestic supply of agricultural products. This means that the farmer must henceforth plan his agricultural production to meet cash home market demands. The time has come, in short, when less dependence is to be placed on the great world staples such as wheat, cotton and pork, upon which the major agricultural activities of the United States have hitherto been based, and more attention must be given to the production of perishable and semi-perishable commodities such as dairy products, vegetables and fruits.

LOUIS BERNARD SCHMIDT

See: AGRICULTURAL SOCIETIES; PLANTATION; NEGRO PROBLEM; FRONTIER; PUBLIC DOMAIN; HOMESTEAD; IRRIGATION; LAND SETTLEMENT; FARM TENANCY; SMALL HOLDINGS; AGRICULTURAL EXPERIMENT STATIONS; AGRICULTURAL MACHINERY; AGRICULTURAL MARKETING; WORLD WAR; AGRICULTURAL POLICY.

VI. AGRICULTURE IN THE ORIENT. *China.* In China perhaps more than in any other country of the Far East the dominant factor in the agricultural situation, as in every other, is the extraordinarily dense population. On the other hand the population is itself affected by the unusually intensive agriculture. For in this country cultivation of the soil has probably reached its absolute maximum of intensiveness. The extent to which intensive cultivation has been carried can best be judged by a comparison of the number of settlers per square mile of cultivated land in China and in the United States.

According to the best authorities a square mile of cultivated land in Chihli has from 550 to 2000 settlers, while in Shantung the number is about 4200 and in the rice lands of Chekiang may run from 2270 to 6860. Other estimates indicate an average for all China of 1783 people per square mile, most of whom live on agriculture alone, with no subsidiary industry of importance. This is indeed a striking contrast to conditions in the United States, where in the year 1900 there were 61 persons per square mile of arable land.

In China as in Japan rice is the chief product of cultivation, especially south of the Yangtse valleys, where wet rice cultivation is the rule. The other important products of southern

China are sugar cane, cotton, tea, bamboo and the mulberry tree for breeding silkworms. The distinctive features of the agriculture of northern China are the loess soil and the adequate and timely annual rainfall, which not only makes artificial irrigation unnecessary but results in the production of a remarkably large crop. The north cultivates primarily wheat, barley, millet, buckwheat, maize and extremely large quantities of dry land rice, cultivated without inundation of the fields. Latterly the soy bean has become very important as an article of export even to Europe, and in the provinces of Shensi and Shantung the cultivation of cotton is considerable.

While China thus cultivates a large variety of products, rice nevertheless remains the most important both as the national food and as the basis for the largest financial enterprise. It is in its cultivation that Chinese skill in producing the largest returns per unit of soil has been most evident. The soil is most intensively cultivated on the very smallest farms, for in wet rice cultivation the young plants attain their first growth in a very small area. They are not transplanted for nine or ten weeks, a sufficient time in which to mature another crop, wheat for example, in the rice fields, and thus put the soil to every available use. Nor is anything ever lost to the soil. All natural fertilizers, especially human excrement and the accumulations of the cities, are applied to it. The fertilizer is often mixed with earth before it is used in the fields, and a humus in which young plants quickly take root and develop is thus artificially generated. These methods are all very simple and to the point; they are practised with minutest care, excessive work and the most primitive tools. In many regions even the plow is still made of wood with iron mountings, and other tools are extremely primitive.

The feudal system prevailed in China down to the second century before Christ. It was destroyed in a series of struggles of which the causes remain obscure even today. We are equally at a loss to know the sources of power upon which China's remarkable political system was built. The state in China is particularly important for agriculture, especially in the rice area, because ultimately it is in charge of the water supply. The distribution of water, its conveyance to even the smallest parcels of land, careful consideration of all interests, especially preservation of the cultivation itself, are of the very greatest importance. Successful and con-

tinuous administration is of value not only to the farmer, however, but to the state as well, for its regular tax revenues are dependent on potential agricultural yield, which in turn rests on the water supply. Irrigation thus forms a foundation for the development of an extensive administration, a connection which Max Weber has shown to have existed also in the history of Egypt. With the decay of political power the water supply in China was administered locally but on the whole, it would appear, adequately. Today China's 200,000 miles of canals are the foundation of a major part of her agricultural system.

Throughout the country the agricultural yield does little more than support the farmers themselves, and more than half the crop is probably consumed at home. Many villages are compelled to remain self-sufficient economic units solely because of the difficulties of transportation. Much freight is transported by human beings. On the primitive cart roads only the clumsy, heavy, two-wheeled wagon can be used, and overland export, except by canal or river, is almost impossible. Consequently hundreds of thousands of farms are practically unaffected by national or international division of labor, and returns are very meager. The farmer's income is more than modest even if we express it in terms of the means of subsistence. The poor household never knows a luxury, and existence must be eked out with less nutritive foods, millet especially. Meat is practically unknown except on the greatest holidays, and the poultry raised is quite inadequate. King estimates that nine times as much poultry is raised in the United States as in China, and 180 times as many cattle. Buddhism is partially responsible for this situation, but there is also the necessity of using all that the soil can yield for direct human consumption.

The houses in the villages are constructed miserably, built only of clay, for the most part, and consisting of a single room in which only the raised sleeping place is heated from below. Grass, roots and dry twigs must serve as the scanty fuel, because the forests have been denuded. It is only very recently that systematic forestry has been undertaken in a few places, as for example in the neighborhood of Nanking. The wretched clothing of the people in the villages is frequently made at home or, when possible, acquired second hand. These conditions are aggravated where, as in some parts of southern China, a system of tenancy prevails

and a large part of the crop must be delivered to the landowner. In such regions, therefore, a radical peasant movement is widespread.

In spite of this poverty Chinese agriculture forms the basis for one of the most stable of economic systems. During the recent years of profound national and municipal changes and of extensive industrial developments, it has scarcely altered. For this the primitive condition of the roads is largely responsible. The construction of modern highways or the spread of a network of railways would soon produce a different situation. Even today it is petroleum, as a means of illumination, and tobacco that induce the peasant to sell his products and to strive for increased production. Whether a more inclusive marketing system could appreciably increase Chinese agricultural production is by no means certain. It is questionable whether anything more can possibly be extracted from the soil by new means, for instance artificial fertilizers. However, the unused time of the winter months constitutes a potential source of considerable income for the peasants, particularly for those in the north, and home industry or seasonal work in factories could very greatly increase their productivity.

Yet even if certain possibilities of development are conceded, under present circumstances they would fail to yield a larger income per family. The tendency of the population to increase is still very strong in China, and increased production would assuredly soon result in correspondingly increased population. The Chinese family system which values highly a large number of children, in combination with the Chinese inheritance law which results in division of property among the sons, has led to minute subdivisions of territory. No falling off of this tendency has hitherto been observable, not even, as in Europe, in well-to-do circles. So long as the ideal of birth control fails to make itself felt in a practical way in China, no decided improvement in living conditions is to be expected.

EMIL LEDERER

See: FOOD SUPPLY; FOOD GRAINS; FAMINE; IRRIGATION.

Japan. Technically Japanese agriculture very strongly resembles that of China. Both are conditioned by an extraordinarily dense population and by similar products of cultivation, chiefly rice and silk. Where the average number of people per square mile for the United States

was 61 in 1900, and for China has been estimated at 1783, in Japan the average number is 2350 per square mile. Conditions and methods of production are therefore very similar in the latter two countries. But in its legal system and its position in the state, agriculture in Japan is distinctive.

The feudal system which was in force in Japan from remote antiquity until 1868 was most consistently and successfully developed in the reign of the Tokugawas, from 1600 onward. By that period the whole country was centrally organized and regulated, with the landed nobility, the daimios, subject to the central authority. About the courts of the daimios, who enjoyed different degrees of rank and influence and varying extents of territory, were grouped the samurai, the retainers or knights. The important thing about this warrior class was that it stood outside the cycle of production and depended for support on a rice revenue which was transmitted by the overlord. The position of the daimios is thus in contrast with that of the European nobility who administered their own lands in organic economic connection with peasant farms. In Japan all the ground was worked by the peasants, who had to give to the overlords a very large part of the gross yield, from one third to two thirds, usually about a half. As early as the eighteenth century the European feudal system was an obstacle to intensive development of agricultural resources, not only because it made impossible the support of a dense population but also by reason of the constant political catastrophes which it brought in its wake. The Japanese feudal system, on the other hand, made possible a stable, intensive agricultural system. As early as 1721 the population of the Japanese islands was estimated at twenty-six million, although Hokkaido, the most northerly of the islands, had not been settled at that time. This corresponds roughly to the present density of population in Poland or France. The figure was consistently maintained into the nineteenth century. It could not increase very materially since there was no agricultural margin, but throughout the reign of the Tokugawas it did not decrease. European history offers nothing parallel to this situation.

With the transition to the new empire the revenues derived by the nobility from the peasants disappeared. They had indeed previously suffered numerous contractions, as the overlords had sought to broaden the founda-

tions of their own existence at the expense of their retainers, the samurai. But the collapse of the feudal system did not produce an unburdened, economically independent peasantry, for more or less extensive estates took the place of political overlordship. Today such large estates comprise approximately half the rice fields, which are administered under a system of tenancy.

Japanese economic life rests on a very narrow agricultural foundation, as only between sixteen and twenty percent of the total land can be used for agricultural purposes. Altogether there are thirteen million acres under cultivation, and actual cultivation is very intensive. On an average one family lives on a *le* (two and one half acres); and since the agricultural population constitutes half the total, two families have to extract their means of subsistence from this area. This is possible only by reason of a high yield per unit of area and very meager nutrition. The rapidly increasing agricultural population has no agricultural outlet. Korea, with the same area as Japan, has sixteen million inhabitants, but the Korean climate does not appeal to the Japanese peasant. Neither does the climate of Manchuria or of Hokkaido. Consequently the agricultural population grows more and more dense or overflows into the cities.

Japanese agriculture is not, as such, comparable to Chinese. The differences consist primarily in a much more modern exploitation of the soil, in the use of better tools and in more intensive intercourse with the city. The Japanese village is not a self-sufficient unit; the rural like the municipal population can read and write, its needs are supplied largely by modern industry. Consequently the peasant is a dynamic element in Japanese economics, he zealously strives to increase his income, he is exposed to all the temptations of his age. From time immemorial the Japanese has had many more wants than the Chinese peasant; he also participates in the finer enjoyments of Japanese culture and consequently finds the narrow limits of possible production doubly oppressive. The attempts to increase production are therefore quite as intensive as the political endeavors which aim to increase the peasant's income by lowering his rent. Indeed the agricultural situation in terms of the development from tenancy to independent ownership is today one of the most difficult social problems that Japan has to solve. Moreover, here as in China the inherently strong tendency of the family to increase pre-

sents one of the greatest obstacles to the adjustment of consumption to possible production.

EMIL LEDERER

See: FOOD SUPPLY; FEUDALISM; FARM TENANCY.

India. Agriculture remains, as it always has been, the chief support of the Indian people. Nine tenths of the population live under distinctly rural conditions, a proportion which, in spite of industrial development, has remained practically unchanged. Three fourths of the people are actually dependent upon agriculture, forestry and stock raising for their livelihood. This proportion rose from two thirds twenty years before the last census (1921). Moreover the business and professional classes often own rural land, and most of the new industrial laborers retain a home connection in the village.

India is a sub-continent and possesses a great variety of climates and soils, yet there are striking similarities as to the appearance of the villages, the farm tools and methods used, the crops produced and the standards of living. The most divergent types of cultivation are in Bengal and Burmah, where there is a heavier and more reliable rainfall than in other parts of the country. At the opposite extreme are semi-desert regions like Sind. But most nearly characteristic of India are the dry areas, sometimes upland, sometimes alluvial, of the Punjab, the United Provinces, the Central Provinces, Hyderabad, Mysore and the Madras and Bombay presidencies. It is the agriculture of these regions which either prevails in, or furnishes the main features of, nearly all Indian rural economy.

India as a whole supports 177 persons per square mile, but in Bengal this figure rises to 578, in the United Provinces to 414, and in some almost purely agricultural districts there and in Bengal to as high as 700. Only about 40 percent of the total area is under cultivation, and about 25 percent is classed as "culturable waste," most of which is not economically cultivable. A considerable part of the land under cultivation is very poor. Part of it lies fallow, often for years at a time; usually something like one third of the total area is actually sown. Since 15 percent of the cultivated area produces two crops, there is about one crop-acre per person dependent on agriculture per year.

The land in India is subject to a great variety of rights. A large estate (*zamindari*) may belong to a single landlord (*zamindar*) or to a village community jointly. Such estates were settled by the East India Company on tax collectors and

others who had claim to them at the end of the eighteenth century, the government of the company at the same time renouncing the right ever to increase the tax assessments. Eighteen percent of the land is under this "permanent settlement," 30 percent is in large estates "temporarily settled" and 52 percent is held by peasant proprietors of various grades. Some of these hold with special rights, while still others hold with special limitations. Likewise there is a variety of types of tenancy. There are tenancy for life and tenancy from year to year. Some tenancies are permanent with fixed payments; some are transferable, some heritable. Beneath the tenants are the village menials and field laborers, who belong to low caste or non-caste groups. Some of these are *de facto* serfs. But the proportion of hired laborers is small; in many sections there is only one hired laborer to four and one half independent cultivators, and in places like eastern Bengal this figure sinks to one hired laborer to eight independent cultivators.

Ownership is widely but unevenly distributed. In the Punjab, which ranks second in amount of land per cultivator, over 43 percent of the owners' holdings are less than three acres in extent. In irrigated areas the holdings are still smaller, one third of the owners often having less than one acre. Most holdings lie scattered in several fragments over the village. A large proportion of the land is tenanted, but generally the tenant has a high degree of security. Rentals are usually paid in cash. The two (united) provinces of Agra and Oudh had in 1924 and 1925, respectively, 76 and 81 percent of their total cultivated areas tenanted; yet only 20 and 15 percent, respectively, were annual tenancies from year to year.

Village houses in India are usually small, built of mud or thatch with almost no furniture to beautify or make them comfortable. However, caste rules require them to be kept clean according to old standards, and they are suited to the hot climate. Food is mainly the coarser grains and vegetables, milk, oil and chillies. A very large minority of the people are always underfed. Clothing is simple and for the great majority inadequate. Often the same untailored cotton cloth is clothing by day and covering by night.

Typical Indian agriculture is a kind of "dry-farming," since, although some areas have abundant moisture, most regions depend upon a monsoon which is seldom too heavy and often too light. In the poorer areas cultivation is decidedly extensive but in well watered regions

of rich soil it is exceedingly intensive. One fifth of the area sown is irrigated. Half of the water used comes from canals, mostly government owned, one fourth from wells and one eighth from "tanks" or ponds. In order to retain moisture there is little deep plowing but considerable working and smoothing of the surface mulch. Methods and tools are old fashioned but not so ineffective as they at first appear to an occidental. They are suited to a hot, dry climate and are fairly adapted to the whole situation. Bullocks furnish the necessary power, while the light, cheap implements which are used are made to go over the ground several times. The most striking deficiencies in this agriculture are the starving of cattle and of soil. Many non-milking cows are kept because they are marks of wealth and of piety. In dry seasons these animals devour every blade of grass and shrubbery so that in many places only thorn bushes survive. The soil receives almost no humus, and with the lack of wood and coal the cow dung is taken for fuel. Artificial fertilizers have been neglected and night soil wasted. More fertilizers and more intensive working in rows and hills are needed. The government has spent much on agricultural schools, experiment stations, demonstrations, etc., but it has had marked success mainly in the selection and production of better varieties of cattle.

Facilities for marketing and finance are little developed and unfavorable to the farmer. They are furnished mainly by local men who belong to merchandising and money lending castes. The small, ignorant cultivator in a land of uncertain crops is often forced to borrow, and he usually borrows or buys on credit from the person to whom he must later sell his produce. His only security is his crop and his land. At best he disposes of his crop under a handicap and at worst he loses his land. Terms of lending and purchasing are commonly secret; the farmer is a bad risk, and with his ignorance and timidity is always at a disadvantage. Rates of interest range from 10 to 75 percent per annum. Repudiation is often the only possible settlement.

Eighty-five percent of the cultivated area of India is used to produce food crops, and seven eighths of these are consumed in the country, the larger part in the villages where produced. Rice ranks first, occupying over one third of the total area sown. Then come wheat, *jowar*, *bajra* and other crops suited to a dry climate. Pulses provide protein for a vegetarian diet. India is

the second producer of both cotton and tobacco and has a monopoly of jute. Yields are generally light, cotton, for instance, averaging under half the amount per acre which is produced even in the United States. Modern transportation and communication have induced a tendency toward growing money crops, but since there are only 2.2 miles of railway per 100 square miles, as compared to 8.42 miles per 100 square miles in the United States (which has only one eighth the average population density), this applies only to a small proportion of the country. With increasing industrialization tendencies to change will undoubtedly be strengthened, but at present throughout the greater part of India it is the centuries old systems and methods of agriculture which prevail.

D. H. BUCHANAN

See: LAND TENURE; VILLAGE COMMUNITY; IRRIGATION; FOOD GRAINS; FAMINE; DRY FARMING.

VII. GENERAL PROBLEMS. *Agricultural Resources.* The agriculture of the tilled field does not and cannot occupy so large a proportion of the earth's surface as may be supposed. Much land is too dry for the cultivated crop, some of it is too wet and some is too steep or stony. Much land is too cold and some is too hot and unhealthy. As a result of these handicaps less than five millions of the fifty millions of square miles of land upon the earth are cultivated fields. The application of present knowledge can scarcely double the area even after generations of peaceful labor.

New discoveries in the science of the soil tend to diminish rather than to increase our estimate of soil resources. After a long period of floundering with unclassified soil facts it has recently been discovered by Russian students that the development of earth or rock material into soil goes through a cycle—young, mature, old. The startling thing is that climate dominates the character of the *mature* soil almost without regard to its geologic origin. For example, the mature soils of the rainy tropics are of very low fertility because the elements of fertility, usually present in mature soil, have been leached out by rain. Java, which might seem to afford contradictory evidence, is probably populous because its volcanic soil was recently blown out from the interior of the earth and therefore is new or young soil. The Central American banana plantations are on the recent outwash of alluvial fans at the foot of the mountains and are therefore also on young soils. As a result of too

much leaching, rainy western Europe has mature soils of low fertility that have been worked into suitable conditions for good agriculture by great labor and can be maintained only by great care. The early abandonment of newly cleared land in the western part of the state of Washington in the United States, where the climate is almost identical with that of England and western France, also dovetails with the newly discovered theory of climatic causation of soils. Good agricultural lands in that type of climate are made and maintained only by hard work and intelligence.

The black prairie soils of the middle western regions of the United States furnish an illustration of the theory of climatic causation of soils. Between the wet forest of eastern Texas and the subhumid and treeless northwestern Texas, and also between the humid forests of Indiana and the semi-arid sagebrush lands of western Nebraska, there is a transition in rainfall and in natural vegetation. Between each of these two regions of rainfall contrasts and their resulting vegetative contrasts is a wide belt of grassland. Grassland makes black soil—"black-waxy," as it is called in Texas. Of similar origin are the black wheat lands of central Kansas, eastern Nebraska, eastern Dakota, Manitoba, Saskatchewan and Alberta. These black soils are a transition belt between the eastern and northern forest (humid) and the sagebrush plains (dry). Similar zones of transition in rainfall, in vegetation and in soil are found in the black land grain fields of other continents. The limited black land area in Argentina has made that country a grain exporter. In Eurasia the Black Belt sweeps from the Black Sea through Russia and far into Siberia. Australia has a little strip, as has the Sudan.

This black soil is the prime grain land of the world. Trains and reapers reached it in the last third of the nineteenth century. The resulting deluge of cheap grain demoralized the agriculture of eastern North America in the last quarter of the last century and caused western Europe to shift from grain farming to livestock and dairy farming. Produce derived from these black soil belts is one of the principal factors in the recent growth of cities. The human race is now in the golden age of urban food supply, because we are skimming the cream from this rich accumulation of past ages by the soil robbing process (agricultural mining) that everywhere has characterized frontier agriculture. Of course science and commerce may en-

able us to maintain this advantage in part by substituting soil conservation (a process involving a greater investment of labor) for mining. Unfortunately this problem is scarcely realized as yet in the United States, although substantial areas are already ruined in most of the states.

Types of Agriculture. The variety of soils, of climates and of cultivations has given us many types of agriculture, most of which are still in existence in some form. The patch agriculture of the tropic forest without draft animals which provides the sustenance of millions in Africa, in the East Indies, in the Philippines and in tropical America can be seen in typical form in the Congo forest. Here at the beginning of the dry season the villager cuts the undergrowth in order to make a small clearing in the forest. He then kills the larger trees by burning or girdling them. Near the end of the dry season he burns the trash and with the aid of sharp stick or hoe plants shoots of cassava, banana and plantain, the seeds of sorghum, corn (secured from white men), rice, beans, peanuts, pumpkins and other vegetables. These the women cultivate by hand and hoe. In two or three harvests the fertility of the leached tropical soil is exhausted. The African gardeners must abandon the garden and make another. When they have tilled all the good garden spots near the village, they move the village. Thus migratory or patch agriculture is explained. This type of agriculture is followed promptly by the returning jungle.

In the West Indies, immediately beside the small, self-sufficient little farms (*conucos*) are the wide expanses of the silver-green fields of the great commercial sugar cane plantations. These must be large in order to support the great mill necessary for the extraction of the sugar. Here also are the banana plantations, which must be large in order to supply bananas enough to furnish cargo for the steamships. In similar tropic expanses the modified jungle becomes a plantation of cacao trees or rubber trees. On the higher tropic lands both east and west other large areas are covered with tea and coffee trees. The workers all get wages and buy supplies at the store as does the farm laborer of Denmark or Illinois.

Plantations are an old institution on the West Indian Islands but are just starting in Africa with the slightly modified forest of oil palms and the new cacao plantations. These plantations rarely have any system of soil preservation or

crop rotation. They have escaped impoverishment by moving as the patch agriculture moves. Cuba, the greatest sugar grower, has the blessing of a wide, nearly level limestone plain, therefore an area of rich land; and Java, the next largest sugar grower, has its volcanic soils. So has Hawaii.

The resemblance of the cotton plantation system of southern United States of America to the roving patch agriculture of the tropics is striking. It has a rainy climate, leached soil, the forest and the Negro. In slave days the cotton plantation migrated to a fresh clearing in the forests, thus abandoning the old fields. Its chief difference is the greater destruction of soil in America through erosion caused by plowing. In recent decades this destruction has been increased by the introduction of chemical fertilizers which have impoverished soils to produce more cotton when they would otherwise have been abandoned to the healing mercies of the briar patch.

Irrigation agriculture is probably second or possibly first in the order of origins. It now supports approximately a third of the human race. Its great early developments were in Egypt, Babylonia, the Indus valley and China. Babylonia and India depend upon large canals. Therefore they require a stable society which means strong government. Hence agriculture here tends to fall with empire. Egypt is more fortunate. Her irrigation depends upon an orderly overflow of the river. Therefore she has had a persistent minimum of agriculture and a continuous occupation by millions of people. Just now with a strong government engaged in water storage enterprises Egyptian agriculture is extending its area through canal building.

Irrigation agriculture has several elements of permanence. The more important are the natural fertility of the unleached, arid land, the irrigation water which nearly always carries fertilizing elements, and the flatness of the land which prevents soil erosion. Its defects are the tendency to seepage, involving great drainage costs, and to the collecting of alkali, which makes desert spots that can only be cleared up by costly arrangements for drainage and washing.

The permanent aspect of irrigation agriculture is particularly evident in the oriental paddy field so extensively developed in China, Japan, India, Ceylon and Java. It has even been developed to an astonishing perfection of

technique on mountain slopes by the Igarots of the hill country of Luzon. Their terraces laboriously constructed for conducting water have made upon mountain slopes one of the world's most spectacular and permanent forms of agriculture. The successful rice field may be called a permanent agriculture because it does not wash away, and the fertilization with human excreta has caused it to endure for millennia. It is interesting to observe the capture of most of its essential elements (except the preservation of fertility) by the machine agriculture of America in the rice plantations of Louisiana, Texas, Arkansas and California. The irrigated agriculture of the United States has, however, added no other new features of importance, representing a transfer both of crops and of technique from the Mediterranean area.

The Mediterranean countries having an open winter with some rain, and a dry summer, have two kinds of agriculture: the irrigated orchard and garden spots, mostly small peasant holdings; and the upland in wheat or barley, sometimes alternating with legumes (pottage). By this process of growing grain by the use of the plow, the uplands of Greece, Italy, Syria and other Mediterranean countries have been in large measure destroyed despite the saving of small scattered areas by terracing. The Old World non-irrigated terrace is spectacular but surprisingly small in area, and it saves only a small percentage of the hill lands. An exception to this record of soil destruction in Mediterranean lands is to be noted in the few plains not irrigable but flat enough to allow plow agriculture for long periods. California is like the Mediterranean countries in almost all respects save the absence of any large upland area suitable for grain, and the great development of the fruit industry resulting from the vast American market and the large export trade that has followed standardized output.

The agriculture of northwestern Europe is on a much more permanent basis than that of southern Europe or eastern United States because of the small proportion of hill land, the gentle rainfall and the summer rain which makes turf and permanent covering. The fallow field system followed by crop rotation, including legumes, has produced the great agriculture that has been perfected there in the last half century with the aid of commercial fertilization and the partial application of science to agriculture. Carefully worked out crop rotations result in grain farms, dairy farms, meat pro-

duced on fattening farms and in shipments of potatoes, beet sugar, fruits and vegetables.

The European type of agriculture has been transferred to eastern Canada (except the Ontario plain), to New England and parts of New York with no change in crop or technique worthy of mention save a lesser intensity and a greater use of pasture. Farther inland and farther south the European crop list was enlarged by corn, tobacco and cotton. These three crops furnish a new element to the European agricultural technique, requiring as they do wide areas of cultivation throughout the growing period of the crop. They all require a climate of summer rain, which happens to fall in torrents that carry away the soil loosened by tillage. This is destroying American soil resources at a rate never before equaled in human history, a rate that makes agriculture impossible for millennia over wide areas.

Pasturage, the lowest form of land utilization, is a kind of residuary legatee inheriting those large areas of land that will grow a little grass or edible browse but not a plowed crop. The nomads following their flocks in Mongolia, central Asia, Arabia and the Sudan have developed well adjusted cultures. Similar grasslands in Australia, South Africa, Argentina, Brazil and western North America have been taken by the commercial cowboy and sheep herder. In a few decades they have greatly reduced the productivity of these pastures in nearly all these regions by excess grazing and the introduction of weeds.

Commercial Agriculture, its Tendencies and Problems. The industrial revolution with its machines in the factory, its railroads and steamships, and lastly its machines on the farms, has given us the modern phenomena of cities and commercial agriculture. In 1800 a good locality for agriculture and manufacturing in the home and village was one that produced grain, fruit, wood and grass for milk, meat and wool. A dependable climate was needed to maintain this completeness of local self-sufficiency without serious crop failure. By 1900 manufacturing had been removed to the cities, and a good location for agriculture was one that produced a few crops, or possibly only one if in quantity sufficient to enable the family to sell the surplus and buy needed articles. It takes more stuff to sell and buy than it does to make and use. Therefore the little factory farms of the era of Julius Caesar and John Adams, by which Latium and New England thrived, could not

meet the needs of 1900 and had been abandoned by the thousands in the course of the three preceding decades. By the year 1930 the necessity of still larger sales has become keenly manifest. In addition to his 1900 needs the farmer must now pay for automobiles, gasoline, radios, phonographs, daily papers and many other new things—perhaps even cosmetics. Therefore he needs to produce a much greater quantity of produce to sell than he did in 1900. Many farms which sufficed in 1900 have failed and have been abandoned in widely scattered regions in the decade 1920-30.

Commercial agriculture is depressed. One cause of this depression is that production has increased faster than consumption, and, as the farmer is nearly always without any bargaining power save supply and demand, farm produce has a lower relative price than it had before the World War. The German and English farmers are in a position strangely like that of their American colleagues. We now see that when applied to farm produce one of the staunch theories of the economists is found to be inoperative. For a century we have been told that machine production, which increased the output, would make more wealth for everyone. The farmer has not found this to be the case in recent years. There is a fundamental difference in this respect between food and other classes of goods. Wealth enables a man to buy almost indefinite quantities of factory goods, but wealth does not increase man's appetite for food. Yet more, this, the richest of all generations, eats less than any other. We ride in the automobile, push buttons, pull levers, save energy, and therefore need less food. To make matters worse for the farmer, the American diet appears to be shifting rapidly from a meat basis to one of cereal, fruit and leaf greens, all of which require in their production much less land than meat requires. The use of gasoline for motors has released millions of acres of land that were once required to produce oats and hay for the horse. The chief thing government has done is to stimulate production and produce a glut. The county demonstration agent has helped to break the market by finally teaching the farmer how to increase production. O. E. Baker (U. S. Department of Agriculture) has shown that since 1920 we have decreased the number of cows and increased the amount of milk; decreased our cattle and increased our beef; decreased our sheep and increased our mutton. The increased efficiencies of agricultural production by way of new and

improved machines, animal breeding and plant breeding are appalling in the number of readjustments that they are forcing upon us. Apparently the process has but begun. Doubtless we can increase agricultural production in the next two decades even more strikingly than we have done in the last two. Knowledge is advancing; machinery is still being improved and its scope widened, as by refrigeration and power on the farm. Business organization in both production and distribution of farm produce will also make great contributions to available supply.

The following are some of the more conspicuous agricultural changes which may be said to be impending because they have already begun in a small way:

(1) The Large Corporate Farm. Montana furnishes us suggestive examples of this kind of development. In 1917 that state had about 35,000 farms where wheat was grown. Eleven years later there were but 14,000 farms, but they were growing more wheat. This resulted from the introduction of the tractor which enabled two, three or even four plows to be used at a time. To harvest the enlarged acreage the combined harvester and thresher came into use. Experiments are now being tried whereby a dozen or even two dozen plows are used as a single unit. This may make the farm of twenty to fifty thousand acres as much the unit in its field as the cotton mill with its long rows of spindles is the normal successor of great-grandmother's spinning wheel.

The hay drier is a subject of experiment in several countries. This machine promises to the farmer a considerable degree of emancipation from the vagaries of the weather in humid lands. The successful experiments with a hay drier operating on minimum units of 640 acres almost rival the Montana wheat experience in indicating the economy of large productive units. This change to large scale production may come very soon. It may even be that the one-family farm is doomed to disappear as the effective unit on the world's level agricultural lands.

(2) Corporate Chain Farms. The business complexities of the farm unit with its problems of nutrition of animals, nutrition of plants, soil management, maintenance of machinery, maintenance of plant purchases, sales, accounting and labor management show how ready is the farm for the application of those principles of division of function that have made the chain stores and the chain factories so effective economically and so appalling socially. This

process is under way in the Middle West. It began by bankers striving to save themselves from loss. It is impossible to predict how far this form of production management may go. Like cooperation in marketing and purchase it relieves the farmer of tasks which by their inherent difficulty are almost impossible for him to do well along with his other labors. Like the large scale farm, this too promises an increase of production per man.

(3) Tree Crops. A large fraction of the world's good agricultural climate and fair agricultural soil is on space taken by hilly land. Therefore it is either unused for agricultural purposes or more commonly it is being ruined by the plow. A whole new series of tree crops might be developed for hilly land—crops that can produce without destroying the land on which they stand. They also have great possibilities for semi-arid lands. Tree crops offer a means of nearly doubling the world's supply of food and of some raw materials during the ensuing century if creative imagination can be applied to the problem.

Millions will probably continue to starve in China, but it is also perhaps true that one of the greatest economic problems of the western world of mechanized industry in the next decades will be the widespread glut both of factory goods and farm products. This is not a problem to be solved in the field, at the work bench or in the laboratory but in the realm of social arrangements.

Economic and Social Position of Agriculture.

A big crop meant prosperity in the domestic era in America in 1800 as it does in China today. A big crop in the age of commercial agriculture is often a calamity to him who grows it. In 1926 two or three million bales of cotton went unpicked in the United States, and the rest sold at the price of picking. In the same season some twenty or thirty million bushels of apples went unpicked and the other one hundred and twenty million bushels sold at picking price or less. There is a glut of truck crops in the American city markets almost every month in the year.

Apparently the prices in gluttable markets can only be kept at a profitable point by the aid of legislation or some similar form of group action. The farmer, especially in America, has shown himself peculiarly weak at group action. Hence he is becoming the prey of the groups that are more effectively organized. The manufacturer gets tariffs. The public utilities are guaran-

teed dividends, and many of them are still in a position to water the stock and thus increase the prices that farmers and others must pay. The railroads are guaranteed good wages for their workers and are almost guaranteed dividends. The banks have a secured position favored by law, and many of them regularly make the borrower pay more than the legal rate of interest.

The causes of this helplessness are easy to see. The farmers are divided into regional groups and into crop groups. The social aspect of their business is too complex for most of them to understand. They are scattered over a vast area. Compare them with manufacturers: the manufacturer can reward those who make his legislation, the farmer cannot; the manufacturer knows what he wants in legislation, the American farmer does not. He displays an unbelievable lack of understanding. Thus, for example, there is in Iowa no large city element in the population of the state. The state has a uniformity of soil and climate and surface not equaled in any other of our forty-eight states. The state has uniformity of interests in the produce of corn, oats, hay, wheat and meat. These crops have been sold, since the days of first settlement, in export markets at a free trade price. For sixty years the people of that state have voted for the protective tariff, which increased the price of almost everything they bought and gave them no aid in selling. They did this apparently in the belief that they were promoting their own self-interest. At the same time they sought protective duties on their own products, the effects of which were bound to be illusory, since these were products of which the nation had a surplus for export. It appears obvious that any program for placing agricultural prices on a parity with industrial must rest upon some form of control of price or of production.

Even in the United States there are a few examples of agricultural price control. Cranberry growers living in restricted areas seem to have an effective price control. Milk producers for certain limited markets have achieved the same result and show a moderate prosperity in the midst of an American farm situation characterized in general by long working hours, very low actual wages and usually no dividends on the investment. Many observers can see in this situation definite evidence of a trend toward serfdom.

Yet there is Denmark, an agriculturally organized nation. In the United States the farmer is

the legislative prey of other classes. In Denmark he controls legislation. The American farmer is a producer for the middleman. The Danish farmer is his own middleman. Indeed Denmark is a most interesting study for the student of social affairs. How is it that they can so far eclipse the Americans? Russia too offers a field for interesting study. There the farmer with his crop and the city man with his fancy stuff are openly struggling to get the better of the trade bargain by means of favorable legislation. China and Japan furnish another very interesting agricultural situation. The industrial revolution which is beginning in the factories probably cannot be extended to agriculture, for in both China and Japan the small farm worked by hand methods and largely by man power is made to produce double crops by processes that machines cannot duplicate. Since commercialization would mean decreased production, the present agricultural system is likely to continue indefinitely. But the condition of the oriental peasant might be considerably improved by the establishment of village industries; and village factories within walking distance of oriental farmers could find millions of workers for a part of the year. A similar labor supply is available in Europe and America. Regional planning is one of the important social reconstructions required by the coming era. Among many other things we may need to restore the conditions of employment that prevailed before the industrial revolution. In those days of household economy the population worked in the fields in summer and at indoor handicrafts in winter. It appears possible that it may now be both economically and socially profitable to let factory machinery stand idle in summer while the farm worker attends to crops; agricultural machinery has long stood idle all winter while its user did little or nothing.

J. RUSSELL SMITH

See: SOILS; IRRIGATION; RECLAMATION; DRY FARMING; DAIRY INDUSTRY; LIVESTOCK INDUSTRY; FRUIT INDUSTRY; MARKET GARDENING; COTTON; TOBACCO; COFFEE; SUGAR; TEA; FOOD GRAINS; NOMADS; PLANTATION; LANDED ESTATES; FARM; SMALL HOLDINGS; LAND TENURE; RURAL SOCIETY; ECONOMIC ORGANIZATION; AGRICULTURAL POLICY; FOOD SUPPLY; AGRARIAN MOVEMENTS; AGRICULTURAL MACHINERY; AGRICULTURAL EXPERIMENT STATIONS; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURE, INTERNATIONAL INSTITUTE OF.

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AGRICULTURE, GOVERNMENT SERVICES FOR. As early as 367 B.C. the Roman Republic recognized the importance of agriculture and the rural population by adopting a measure limiting the size of private estates acquired from the public lands. Numerous other laws relating to agriculture followed, practically all of them dealing only with land ownership. European legislation in the Middle Ages and the Renaissance was concerned chiefly with permitting enclosures of common land and with prohibiting increased wages for farm labor.

It was not until the eighteenth century that the agricultural revolution in Flanders, later moving to England, and the notable decline in the population of France, caused serious governmental consideration of effective scientific and economic aid to agriculture. The first steps were informal and tentative, such as the importation of a few pure bred cattle and the extension of some measure of state aid to agricultural societies.

In the following century government services for agriculture developed chiefly along two important lines: first, the formation of organizations for research and education; second, the extension of special credit privileges to farmers, the development of reclamation projects, the protection of agricultural labor, and the development of regulatory activities as to foods, feed stuffs and the like.

Practically all nations of agricultural importance now have government departments of agriculture, primarily for research and the dissemination of its results. Most of these departments were founded in the nineteenth century, either separately or as divisions of other departments. In some countries the experiment stations are under direct control of the Department of Agriculture. In practically all countries, however, most of the stations are governmental institutions, as are the colleges of agriculture and the agricultural secondary schools. Notable experimental work has been done under governmental auspices in Great Britain, Germany, France and, particularly as to soils, in Russia. In practically all European countries excellent college and university courses in agriculture are offered, these institutions being almost invariably state supported. Secondary education in agriculture has been developed

to probably the highest degree in Denmark.

Governmental services to agriculture have been developed most extensively in the United States, except as regards certain advanced forms of social legislation affecting agriculture. In colonial days subsidies and bounties were offered by both the British and colonial governments to stimulate various lines of agricultural production. The raising of silkworms especially intrigued the fancy of the politicians, and financial encouragement was extended to this industry in Virginia, Georgia and South Carolina. Hops, indigo, hemp, lumber, pitch, tar and sheep were also subjects of governmental assistance. The aid extended consisted variously of premiums, land grants, instruction, the repeal of duties, and the payment of bounties on the products when shipped to England.

Subsequently, when the United States attained its independence, its most influential citizens expressed special interest in agriculture. Either they had had personal experience in farming, as had George Washington and Thomas Jefferson, or they recognized its importance in the development of the young nation. Their thinking was influenced by knowledge of what Arthur Young and other proponents of the agricultural revolution had done in England (Young corresponded extensively with Washington), and by the agricultural theories of the French physiocrats, which are plainly evident in Jefferson's eulogies of the farmer. In his last message to Congress in 1796 President Washington advocated government support for agricultural institutions in these words:

"It will not be doubted that, with reference to either individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity this truth becomes more apparent, and renders the cultivation of soil more and more an object of public patronage. Institutions for promoting it grow up supported by the public purse, and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end, none have been attended with greater success than the establishment of boards composed of proper characters, charged with collecting and diffusing information, and enabled, by premiums and small pecuniary aids, to encourage and assist a spirit of discovery and improvement. This species of establishment contributes doubly to the increase

of improvements by stimulating to enterprise and experiment, and by drawing to a common center the results, everywhere, of individual skill and observation, and spreading them thence over the whole nation. Experience accordingly has shown that they are very cheap instruments of immense national benefits."

The proposal was lost in Congress, however. The early governmental support given to agriculture was not federal, but state. State aid was extended by Massachusetts to the Society for Promoting Agriculture as early as 1792. New Hampshire extended aid to county societies in 1817. Similar aid was extended by various other states. The money received by these societies was employed largely in publishing articles on agriculture, and in giving premiums either for exhibits of crops and livestock or for new discoveries in agricultural practise.

Aid was first extended by the United States government in 1839, when Congress appropriated \$1000 for collection of agricultural statistics for agricultural investigations, and for the procurement of cuttings and seeds for free distribution among the farmers. The work was placed in charge of the Patent Office because Henry L. Ellsworth, then commissioner of patents, had already begun volunteer distribution of seeds and plants from abroad and had shown special interest in governmental aid for agriculture. Appropriations continued to be made to the Patent Office for agricultural purposes for more than twenty years, the high mark being reached in 1855, with \$50,000. In 1862 agriculture was placed in a separate department with a commissioner at its head. In 1889 the commissioner of agriculture became secretary of agriculture with a place in the president's cabinet.

The Department of Agriculture has shown steady development, being now by far the largest organization in the world devoted to agricultural research and the dissemination of agricultural information. The total number of employees is approximately 22,000, and the annual expenditures are more than \$150,000,000, two thirds of which is for road construction, subsidies to states for research and extension work, and conservation purposes.

The other work of the Department of Agriculture includes the following types of activity:

(1) Research, such as experiments in animal and plant breeding, investigations in pure

science underlying agriculture, horticulture, forestry and similar subjects; experiments in methods of controlling animal and plant diseases and pests; in soils; in the economic problems of agriculture, such as farm management, individual and cooperative marketing, and the discovery of new uses for farm products. The actual practises of farmers on farms and in cooperative and other organizations are studied. Extensive statistical data are gathered.

(2) Extension work, the dissemination of facts discovered through research, carried on in the Office of Extension, in the Office of Information and in individual bureaus. Each year the Department distributes approximately 30,000,000 copies of its publications. It presents authentic agricultural information through more than 100 radio stations. It exhibits educational motion pictures before many gatherings of farmers. It supplies agricultural copy to newspapers and agricultural journals. It prepares numerous exhibits for large fairs. Largely in cooperation with the states, it carries on extension work through county agricultural agents, home demonstration agents and boys' and girls' club agents. Demonstration has proved especially effective.

(3) Eradication or control of plant and animal diseases and pests through organized campaigns, independently or in cooperation with state agencies. It is interesting to note that since the passage of the Plant Quarantine Act in 1912 only one major agricultural pest, the pink bollworm, is known to have become established in the United States.

(4) Service work, such as administration of the national forests, the weather service, crop and livestock estimating, the market news service, and inspection service on farm products at shipping points and terminal markets.

(5) Regulatory duties, comprising administration of approximately forty laws, including the Food and Drugs Act, the Meat Inspection Law, Plant and Animal Quarantine Acts, the Migratory Bird Treaty Act, the Cotton Futures and Cotton Standards Acts, the Grain Standards Act, the Warehouse Act and the Packers and Stockyards Act.

The Department of Agriculture is headed by the Secretary of Agriculture and the Assistant Secretary. There are five directors, covering respectively the fields of scientific work, regulatory work, extension, information, and personnel and business administration. Legal matters are handled by a solicitor and his staff. Bureaus and offices, organized on the basis of

subject matter, comprise experiment stations, weather, animal industry, plant industry, forestry, chemistry and soils, entomology, biological survey, public roads, agricultural economics, home economics, plant quarantine and control, and foods, drugs and insecticides. The last two offices are organized for the enforcement of laws, while the others are engaged mainly in research. The library, containing 205,000 volumes, is the largest agricultural library in the world. Its facilities are employed by scientists outside, as well as within, the Department of Agriculture.

In the same year that the Department of Agriculture was established Congress also passed the Land Grant Education Act, which offered public lands to each state for the establishment of colleges of agriculture and mechanical arts. Such colleges now exist in every state in the union, and in Alaska, Hawaii and Porto Rico. In some cases the Land Grant college is a separate institution, while in other instances it is connected with the state university. A number of southern states have separate Land Grant colleges for Negroes. State experiment stations were subsidized by an act of Congress in 1889, and most of the existing state stations owe their founding to this act, although several had been established earlier. Later legislation (1925) has furnished still more extensive federal funds to these stations, giving them special opportunity to develop investigations in agricultural economics and in home economics. The federal government itself maintains stations in Alaska, Guam, Hawaii, Porto Rico and the Virgin Islands. Extension activities, aside from the publishing of agricultural information, began with lectures before farmers, which gradually developed into farmers' institutes. The institutes began in the sixties and reached their maximum influence between 1900 and 1915. In 1914, 8861 institutes were held, with an aggregate attendance of 3,050,150. Most of the institutes lasted one or two days, a few extending over three or more days. From 1916 on, the institutes declined. Their place has been taken largely by the system of county agricultural agents and county home demonstration agents, involving actual demonstrations under local farm and home conditions. During the same period boys' and girls' clubs have developed extensively, their members undertaking practical farm and home projects and also endeavoring to interest their communities in higher standards of agriculture and rural life.

All of the modern extension activities are increasing group thought and action as a habit in country neighborhood life, and are stimulating individual ambitions for more satisfying homes and communities. The federal government gives aid to high schools offering instruction in agriculture and home economics.

Large sums are expended by the states for agricultural education, research and extension. Certain of the federal appropriations are conditional upon equal expenditures by the states. Many states also pay the expenses of boards or departments of agriculture engaged chiefly in gathering and supplying information of use to agriculture, although other government services are also furnished. For example, seeds and plants, either imported or developed in the United States, are at times distributed by the United States Department of Agriculture or by state agricultural colleges to farmers qualified to make use of them in practical field tests. For many years a vast quantity of seeds was distributed by the Department of Agriculture through members of Congress, but this practise came to be recognized as undesirable and was abolished June 30, 1923. Rural free delivery of mail, which has brought the farmer into close touch with the thought of the nation generally, was begun in 1896. It now reaches approximately 24,282,000 people. The good roads movement, on which vast sums have been expended by national and state governments, has also been a potent means of communication for farmers. The weather service was recognized as especially useful to agriculture as early as 1890, when Congress transferred it from the army to the Department of Agriculture. Its forecasts have been of incalculable value to agriculture, especially since they have been disseminated by radio.

Extensive projects have been undertaken for land reclamation. Swamp lands have been reclaimed only under state laws, inasmuch as the federal government by legislation in 1849, 1850 and 1860 granted all the federal swamp lands to the states in which they were situated. Practically all of the drainage enterprises under state laws consist of corporate districts or county drains, the cost in both cases being met by assessment against the land benefited. Projects for reclamation of dry land by irrigation have been undertaken under both state and federal auspices. State aid has generally been undertaken in much the same way as in the case of swamp lands—through irrigation district

laws, making the lands liable for the cost of their own reclamation. The first state or territorial law for irrigation was passed by Utah in 1865. In 1894 Congress passed the Carey Act providing for patenting large areas of desert lands to several states on condition that the land be reclaimed by irrigation and sold to actual settlers. Eight years later the federal government actually entered into reclamation projects. The work has been administered by the Department of the Interior. Early projects proved largely disappointing because of failure to consider the actual needs of settlers aside from the provision of sufficient water. Beginning in 1923 more adequate methods have been undertaken with the purpose of determining, before construction is authorized, the feasibility of a project and its dependability for actual settlement of farm homes. While in some cases reclamation projects have proved successful, in others they have resulted in dissatisfaction to the settlers and in losses to the federal government. In view of the overproduction of various cash crops in the United States in recent years, there is a strong feeling against the reclamation of further land for the present.

Closely related to land reclamation is the California land settlement plan, the only example of its kind in the United States. Under this plan the state buys land, provides irrigation and drainage works so far as necessary, subdivides the land into farms, farm laborers' allotments and town lots, and sells the land on easy payments to actual settlers. Two colonies have been established under the law, but the time since their establishment has been too short to predict the extent of their ultimate success. Similar projects have been proposed for adoption by the federal government.

All these government projects possess the advantage of being backed by the public treasury and consequently of being able to carry settlers through periods of depression such as are almost universally characteristic of agriculture, and for the elimination of which no government has yet found adequate means. They possess such disadvantages as may be associated with contemporary political control.

Cooperative marketing, doubtless the most important project on the business side of agriculture in this century, has received both federal and state aid. This has consisted in the furnishing of information and in the passage of legislation enabling these organizations to

function effectively. Delaware is the only state having no law governing cooperative associations. The Capper-Volstead Act, passed by Congress in 1922, places upon the secretary of agriculture responsibility, upon the one hand, for protecting the public against unwarranted use of power by cooperatives and, on the other hand, for protecting the associations from unwarranted prosecution. The federal government has also established a division of cooperative marketing in the Department of Agriculture for the purpose not only of studying effective practises in cooperation but also of supplying useful information as to market conditions to the cooperative organizations. Until very recently the United States, in contrast to some European countries, has not extended financial aid to cooperatives. However, through the Federal Farm Board established by the Agricultural Marketing Act of 1929, the federal government intends to encourage the organization of cooperatives and to aid in financing their operations in the hope of promoting orderly marketing of agricultural products.

Considerable service has been rendered to farmers by means of extension of credit. The Federal Reserve Act of 1913 permits five-year loans on land to farmers to the extent of 25 percent of the capital and surplus of the bank. This is only an incidental feature of the law, however. Much more extensive facilities are offered by the Federal Farm Loan Act passed in 1916, following a study of European practises. The establishment of the Federal Reserve System added a certain flexibility in the handling of short term agricultural paper. The Agricultural Credits Act of 1923 set up federal intermediate credit banks which may loan directly to cooperative associations, may rediscount for other banks, and in turn may rediscount with the Federal Reserve Banks. It also set up agricultural credit corporations to deal in agricultural, including livestock, paper.

Long term credit to farmers is also provided by a number of states. Minnesota, Oregon, North Dakota and South Dakota have special systems for the purpose of supplying farm credit. The most elaborate system is provided by the Bank of North Dakota. Arizona, Colorado, Idaho, Maine, Montana, North Dakota, Oklahoma, Oregon, Utah and Wyoming offer a small amount of rural credit through the administration of the school land or other public land funds. Some states also have legislation providing for credit unions or cooperative credit associations.

Various special services to farmers have been offered by certain states. North Dakota, through the efforts of the Nonpartisan League, offers the most conspicuous example. In 1919 the state established, in addition to the Bank of North Dakota, a mill and terminal elevator, a home building association, and hail, fire and tornado insurance. The home building association proved unsuccessful and disbanded. The other agencies still exist; after weathering the agricultural depression, they have achieved a fair measure of success, in spite of the prevalence of opposition to the Nonpartisan League. Several other states maintain insurance departments which carry certain risks, most important of which, from the specific standpoint of the farmer, is hail insurance. For the most part, however, hail insurance, like fire insurance, is in the hands of joint-stock or mutual companies.

On the whole, government assistance to agriculture in the United States has been limited to the provision of information and advice. This is manifestly due to the high degree of individualism among American farmers, which in turn is attributable, in considerable measure, to the great territorial area, and the fact that farmers, for the most part, live on their separated farms and not in villages, as in certain European countries.

In many other countries conditions are quite different. For example, in Austria, between 1890 and 1900 cooperative organizations were provided with an elaborate system of subsidies for the export of agricultural products, the employment of specialists, the construction of necessary buildings, and the purchase of machinery. In time, however, this aroused a certain opposition, and some cooperatives were formed with the policy of accepting no government aid. In Belgium, the *comices agricoles*, the technical agricultural societies, are semi-official. In a number of countries agricultural insurance receives special state support. France subsidizes cooperative livestock and some other forms of insurance. The province of Alberta in Canada operates hail insurance on the basis of a tax. Special credit facilities are offered to farmers, especially through cooperative associations, by practically all European countries, while agricultural credit is also available in countries in South and Central America, Africa, Asia and Australasia.

Agricultural labor is protected in many countries. For example, Ecuador, Esthonia and

Spain regulate the hours of labor directly, while in Austria, Czechoslovakia, England, Germany and Poland the hours of labor are fixed by agreement or regulation legally enforceable. In the United States, in which the number of farm laborers is only about half the number of farms, regulation of hours of agricultural labor has always been successfully opposed by owning and tenant farmers.

There are state employment services in many countries. In the United States, however, the service provides largely seasonal labor. Italy is the only country which has compulsory unemployment insurance for agricultural workers. In Denmark and in the Netherlands there is voluntary unemployment insurance under state supervision.

Special aid to agriculture has been given by various governments through land settlement plans. The Australian system is of special significance in that it provides for either individual or colony form of settlement, for the grouping of lands to provide town sites, farm laborers' allotments and regular farm areas, for the organized construction of agricultural improvements, for the selection of settlers on the basis of their fitness, for long-term credit, for the prevention of speculation so far as possible, for the establishment of demonstration farms for advice and instruction, and for cooperative community organization. Denmark supplies state funds to rural and urban laborers of small means for the purchase of small holdings, the purpose being to support the small holdings system, which has been successful in that country for more than a century. Finland has a state land settlement fund for loans to communal societies for settlement on the land. These societies in turn supply credit to the various land settlement undertakings. There is also a state land fund for cooperative societies to supply floating capital to small landowners. In England the colony form of settlement has been put into effect under the Board of Agriculture and Fisheries, the state guaranteeing against financial loss. Each colony is managed by a director, the settler being employed at the current rate of wages, but receiving also a share of the profit from the farming operations. In New Zealand loans have been made by the state to settlers on land since 1894. In Italy the state gives aid to the purchase of land by cooperative societies for agricultural purposes. Various dues and taxes are remitted, and credit up to 80 percent of the value of the land is extended.

Practically all civilized countries have adopted systems for the diffusion of agricultural information. For a long time the colleges and universities were the only source of instruction, and they reached only persons of exceptional ability, training or opportunities. Chiefly since 1900 the movement to reach working farmers and their families with practical information has gained impetus in practically all countries, while greater and greater emphasis has been laid on the study of agriculture in the rural schools and, in some agricultural countries and regions, in city schools also.

The kind of service given to farmers in this field differs in various countries. For example, the several states of Australia maintain more than fifty experimental farms, in addition to approximately twenty times this number of experimental plots on private farms. Thus the double purpose of experimentation and demonstration is served. In addition each state lays great emphasis on personal visits by the experts of its department of agriculture to individual farms. Lectures and demonstrations are given under the auspices of the agricultural bureaus, which are local organizations of farmers for the promotion of agriculture. The Dominion of Canada maintains some twenty-five experimental farms and stations, in addition to demonstration farms and plots operated by the provincial departments of agriculture. It has also a system of agricultural representatives comparable to county agricultural agents in the United States, but responsible wholly to the respective provincial governments. The Farm Women's Institute, which has spread throughout the world since 1899, is a Canadian contribution, as are also rural school fairs. In Chile every elementary school maintains a class in agriculture and a field for agricultural experiment. The teachers are trained by annual courses offered by professors in the Higher Institute of Agriculture. The government gives special short courses in the various branches of agriculture, and also sends special demonstration trains throughout the country to promote better methods of cultivation. Denmark has made one of its chief contributions to agricultural services for farmers in an indirect way through the establishment of the people's high schools. It is due not only to the instruction but also to the spirit developed in these institutions that agricultural cooperation has proved so successful in that country. Denmark also has an elaborate system of lectures by experts paid

wholly or in part by the government for the assistance of practical farmers. There are special schools for small allotment holders, as well as other agricultural institutions. Agricultural education in Denmark dates from 1845. In France each department has a director of agricultural services, assisted by one or more professors of agriculture. Instruction farms, schools of agriculture, schools of home economics and women's institutes are likewise maintained. A system of chambers of agriculture is also provided for by law. In Great Britain research has been carried on very effectively. Most of the counties employ a paid official called an agricultural organizer, who advises farmers and arranges lectures. Belgium employs about thirty agricultural experts, the same number of deputies and a smaller number of horticultural advisers. These men reach the farmers by lecture, demonstration and personal visits. In particular the government requires them to instruct farmers in the advantages of organization. In Germany agricultural experiment and instruction are heavily subsidized by state governments, and much work of high quality has been done. The chambers of agriculture, which are not government bodies, have done much in local agricultural organization and instruction. In Spain there is a law permitting demonstration fields to be maintained cooperatively by villages and district farm schools, the villages furnishing the land, and the schools the technical direction, machines, seed and fertilizer. Comparatively few villages, however, have adopted the plan. The schools are required by law to give short farm courses. Experimental and demonstration work, similar to that maintained in European and American countries, is carried on in China, although on a smaller scale. In Japan there are more than fifty agricultural experiment stations, short courses are offered in both agriculture and home economics, and the lectures are frequently illustrated by lantern slides or motion pictures. Agricultural courses are regularly given in the army to soldiers from rural districts. The government has also distributed large quantities of improved seeds and plants.

The technical agricultural services offered by the government of Soviet Russia are of special interest as representing the point of view of a political system very different from the systems of other nations. The government offers much material assistance to small farmers who will unite into agricultural coop-

eratives, while it prohibits any effort to coerce the peasants into cooperation. The purpose is a great socialized agricultural industry. In addition the government has organized the *Sovkhozy*, or grain producing enterprises. These are large, highly mechanized farms, following largely the practises that are used in modern wheat ranches in the United States. On January 1, 1928, 2,722,000 hectares (approximately 7,100,000 acres) were embraced in the system, each *Sovkhoz* having an average size of 500 hectares. In 1928 the government began a program of more than doubling the extent of the *Sovkhozy*, wherever possible, by adding new farms. By 1933 the government expects to have replaced all primitive Russian plows with modern mold-board plows, of which it is estimated that 7,000,000 will be needed. In the same period it is planned to put 100,000 tractors into the farming industry.

The government has adopted a ten-year colonization plan to settle more than four million people on fertile border lands. Irrigation and other reclamation projects are provided for. Considerable emphasis is laid not only on improving agriculture but on strengthening the border regions economically and politically.

The experimental, educational and extension work in Russia is similar to that in other European countries. In 1927 there were seventy-one agricultural experiment stations and several other laboratories supported by the government.

The International Institute of Agriculture (see AGRICULTURE, INTERNATIONAL INSTITUTE OF), founded in 1908 through the efforts of David Lubin, is the most potent means for international collaboration and cooperation in technical matters connected with agriculture. The League of Nations, through its Economic Consultative Committee, deals with some agricultural problems. Its relation to technical services rendered by governments to agriculture has not as yet, however, become well defined.

NELSON ANTRIM CRAWFORD

See: AGRICULTURE; AGRICULTURAL POLICY; AGRICULTURAL MARKETING; AGRICULTURAL CREDIT; AGRICULTURAL INSURANCE; AGRICULTURAL COOPERATION; AGRICULTURAL LABOR; AGRICULTURAL SOCIETIES; AGRICULTURAL EXPERIMENT STATIONS; COUNTY AGENT; CROP REPORTING; FOOD AND DRUG REGULATION; RECLAMATION; IRRIGATION; LAND SETTLEMENT; SMALL HOLDINGS; ALLOTMENTS; FARM LOAN SYSTEM, FEDERAL; AGRICULTURAL EDUCATION.

Consult: Gras, N. S. B., *A History of Agriculture in Europe and America* (New York 1925); Heitland,

W. E., *Agricola* (Cambridge, Eng. 1921); Ernie, Lord (Prothero, R. E.), *English Farming, Past and Present* (4th ed. London 1927); Augé-Laribé, Michel, *L'Evolution de la France agricole* (Paris 1912); Herrick, M. T., and Ingalls, R., *Rural Credits, Land and Cooperative* (New York 1914); International Labour Office, *Technical Survey of Agricultural Questions* (Geneva 1921); Bidwell, P. W., and Falconer, J. I., *History of Agriculture in the Northern United States* (Washington 1925); Wiest, E., *Agricultural Organization in the United States* (Lexington, Ky. 1923); True, A. C., "Education and Research in Agriculture in the United States" in U. S. Department of Agriculture, *Yearbook 1894* (Washington 1895) p. 81-116, and "A History of Agricultural Extension Work in the United States 1785-1923" in U. S. Department of Agriculture, *Miscellaneous Publication no. 15* (Washington 1928), and "History of Agricultural Education in the United States" in U. S. Department of Agriculture, *Miscellaneous Publication No. 36* (Washington 1929); Eliot, Clara, *The Farmer's Campaign for Credit* (New York 1927); yearbooks and reports of departments of agriculture of all countries.

AGRICULTURE, INTERNATIONAL INSTITUTE OF. Around 1900 David Lubin, a California merchant, became convinced that agriculture urgently needed an international clearing house for timely information on the extent and condition of crops, and the number and kinds of livestock. He argued that the wise adjustment of agriculture in any country depended upon an accurate knowledge of the industry in other countries. In addition he held that crop areas and conditions were important price making forces which should be a matter of public knowledge. Lubin attempted to interest various governments in the promotion of such an organization. These efforts brought him in touch with the king of Italy, who was impressed with the logic of this enthusiastic American and commended the plan to the favorable consideration of his government. As a result the Italian government sponsored an international diplomatic conference which culminated in the formulation of a treaty signed on June 7, 1905, by the representatives of forty nations. This treaty created the International Institute of Agriculture, with its center of operations in Rome.

The institute is an official organization, supported by governments. Voting powers are regulated in accordance with the financial obligation voluntarily undertaken by each nation. Colonies and dependencies are admitted on the same conditions as are independent nations. The legislative body is the General Assembly, which meets, as a rule, once every two years. Executive responsibility rests

with a permanent committee. Each adhering state has the right to appoint one representative on this committee. The institute has as organs of consultation and collaboration the Agricultural Advisory Committee, the International Scientific Agricultural Council, the International Permanent Commission of Agricultural Associations, the International Commission for Coordination in Agriculture and the International Agricultural Economic Council. The International Scientific Agricultural Council has a membership of more than six hundred experts, representing fifty-three countries and grouped in twenty-three technical commissions which are concerned with special studies and activities.

The institute is empowered by Article 9 of the treaty to deal with the entire range of problems affecting the welfare of agriculture. The one general limitation on its activities is that "all questions relating to the economic interests, the legislation and administration of any particular state must be excluded from the sphere of the Institute." Its most important work is the collecting, compiling and disseminating of agricultural statistical data. It maintains an extensive cable service for keeping in touch with the areas sown, crop conditions and harvest yields of the more important staples. It is at all times cooperating with governments with a view to increasing the accuracy and extending the scope of their agricultural statistics. To this end the institute is attempting to promote a universal agricultural census in 1930.

Such matters as world prices of agricultural produce, agricultural legislation, agricultural cooperation and trade in agricultural produce are being studied by the institute. It hopes to stimulate movements for international plant protection, protection of animals useful to agriculture, standardization of meat inspection, regulation of cheese descriptions, unification of cheese analysis methods, and similar projects. The plans will be worked out at international conferences.

The institute publishes monthly in five languages the *International Review of the Science and Practice of Agriculture* and the *International Review of Agricultural Economics*; it publishes also the *International Year Book of Agricultural Statistics* and the *International Yearbook of Agricultural Legislation*. In addition it issues numerous monographic studies. The number of signatory powers has increased from

forty in 1905 to seventy-four in 1929. The estimated expenditure for 1928 was approximately 5,000,000 lire—\$265,000.

ASHER HOBSON

See: AGRICULTURE, GOVERNMENT SERVICES FOR.

Consult: *International Institute of Agriculture; General Policy and Activities*, Statement presented to the General Assembly of 1926 by G. de Michelis, President (Rome 1926); Wieth-Kundsen, K. A., "Entwicklungsgeschichte des internationalen Landwirtschaftsinstituts in Rom" in *Festschrift für Lujó Brentano zum siebenzigsten Geburtstag* (Munich 1916) 439-60; *International Institute of Agriculture, Procès-verbaux* (Rome 1912-).

AGUESSEAU, HENRI FRANCOIS D'. See DAGUESSEAU, HENRI FRANCOIS.

AGUSTIN, ANTONIO (1517-86), Spanish juristic philosopher. He was born in Saragossa, studied philosophy and law in the universities of Alcala and Salamanca, and went to Italy in 1535 to study in Bologna and Padua. In Bologna the great Alciati initiated him into the methods of the new jurisprudence. Agustín broke away from scholastic tradition and went directly to the study of the sources. In 1541 he moved to Florence to study the celebrated manuscript of the Pandects; the result of his studies was his first great work, *Emendationum et opinionum libri IV juris civilis* (Basel 1544), a book which aroused the admiration of all scholars. It was followed by a series of studies of constantly increasing importance, one on the *Novels* of Justinian, the manuscripts of which he studied in Venice; another, the splendid work *De propriis nominibus τῶν πανδεκτῶν Florentini* (Tarragona 1579) which revealed wide horizons to juristic science. Of the utmost importance in canon law are his corrections to the so-called Gratian Decretal, in his book *De emendatione Gratiani* (Tarragona 1587).

Agustín's theological and juristic learning combined to make him one of the greatest authorities and one of the most frequently consulted at the Council of Trent for the three years during which he was present at its sessions. The papacy entrusted delicate diplomatic missions to him, and in 1574 the king of Spain named him archbishop of Tarragona, where he died in 1586. His labors as a humanist and archaeologist were considerable.

FERNANDO DE LOS RIOS

Works: *Opera omnia*, ed. by J. Rocchius, 8 vols. (Lucca 1765-74).

AHRENS, HEINRICH (1808-74), author and teacher in the field of legal philosophy and political science. He was born in Hanover, was a student and later *Privatdocent* in the University of Göttingen, and was professor successively at Brussels, Graz and Leipsic. His departure from Göttingen was made necessary by his part in the revolutionary disturbances of 1831.

Ahrens' chief work was in legal philosophy. His particular contribution in that field was that of elaborating, explaining and popularizing (among savants) the legal doctrine of another German author—the philosopher K. C. F. Krause. According to Krause, law, viewed ideally, is the embodiment of principles that harmonize nature, human reason and God; laws, more concretely, define the modes of progress toward the actualization of that ideal harmony. This "idealistic-organismic" legal philosophy, which Krause set forth in a somewhat mystic spirit and in difficult and technical terminology, Ahrens expressed in fuller, clearer, more realistic form. He is thus known as founder or principal representative of this particular sort of "natural law" legal philosophy. A specific contribution of importance which he made is in his application of that philosophy to the social basis of the state, with detailed discussion of the organic relations between the state and the various smaller corporate associations into which individuals naturally group themselves.

FRANCIS W. COKER

Important works: *Cours de droit naturel* (Paris 1838) (over twenty editions in six languages); *Die organische Staatslehre auf philosophisch-anthropologischer Grundlage* (Vienna 1850); *Juristische Encyclopädie* (Vienna 1855) (editions in five languages); *Naturrecht oder Philosophie des Rechts*, 2 vols. (Vienna 1870-71) (a complete revision of the *Cours de droit naturel* and the *Organische Staatslehre*).

Consult: Mohl, R. v., *Die Geschichte und Literatur der Staatswissenschaften*, 3 vols. (Erlangen 1855-58) vol. i, p. 86-87, 157; Berolzheimer, F., *System der Rechts- und Wirtschaftsphilosophie*, 5 vols. (Munich 1904-07) vol. ii, p. 259-63, tr. by R. Sz. Jastrow as *The World's Legal Philosophies* (Boston 1912) p. 244-48; Coker, F. W., *Organismic Theories of the State* (New York 1910) p. 32-35.

AIDS. The word aid (*aide*, *ayde*) meant originally any aid or subsidy granted to a suzerain at irregular intervals. By custom the lord had the right to call upon his vassals or copy-holders for aids on stated occasions. In general these were the payment of the ransom of the lord when made prisoner of war, and of the expenses incident to the arming of his eldest son when

knighted, the marriage of his eldest daughter and his departure for a crusade. In this original form aids were known throughout feudal Europe, but only in France did they survive feudalism. This article will therefore consider the development of aids in France from the fourteenth century to the revolution.

Toward the end of the thirteenth century, when the great expansion of the royal domain transformed the little Capetian suzerainty into an important state, the resources in men and money that the feudal law granted to the lords, and above them to the king, became quite insufficient. It was therefore necessary for Philip the Fair (1285-1314) and his successors to find new revenues. They tried to force the acceptance of the new and non-feudal principle that to the king belonged the right of taking all the necessary measures, fiscal and military, for the defense of the kingdom. The entire history of the fourteenth century is filled with the struggles which the French kings had to wage in order to levy throughout the kingdom new taxes not allowed by the feudal law. When they obtained these taxes they were usually limited by the condition that these *aides*, taking as they did the most diverse forms (taxes on the sale of merchandise, taxes on salt, taxes on income, hearth-money, etc.), should be collected and expended by the *élus* (deputies of the Estates) and that they be devoted exclusively to the object—generally the upkeep of the army—for which they had been requested from, and approved by, the Estates General.

By a remarkable coincidence even the military defeats of the French monarchy made for progress in this direction. The captivity of John the Good (1350-64) and his ransom, payment of which was a recognized obligation for the entire feudal hierarchy, facilitated the transformation of these occasional *aides* into a permanent tax, and of the *élus* or *surintendants* charged with their administration into royal agents. The skilful policy of Charles v (1364-80) initiated the transformation which, though it was slow and difficult, was completed by the time of Charles VII (1422-61). At the same time that the *taille* was made permanent under this king, the *aides* also became permanent. The ordinance of February, 1436, reestablished them after a long interruption as an indirect tax consisting of a basic rate of 12 deniers to the livre on all sales, plus special taxes on the sale of wines and other drinks. The same ordinance detailed the measures to be taken for

the farming of *aide* taxes—farming which until 1604 was done, not *en bloc*, but separately for each kind of tax and for each province. Thus from that method of collections of *aides* by the *élus* of the Estates, nothing remained but the word *élus*. This continued to be applied, erroneously, to agents who were no longer elective but were appointees of the king and were soon owners of their offices. These *élus* constituted the local fiscal administration in *pays d'élections*, that part of France which had no provincial Estates. Above them were two types of superior officers originally chosen by the Estates General: *généraux sur le fait des finances*, charged with administrative supervision, and *généraux sur le fait de justice*, who as *cours des aides* passed final judgments on all tax litigations.

Henceforth the word *aides*, entirely losing its original general meaning, came to be applied only to taxes on drinks and certain other articles of minor importance. There were considerable local differences in the levying of these *aides*, differences which dated from the very time of their establishment and which were retained to the end of the *ancien régime*. Some provinces and cities had bought themselves free of these taxes, in whole or in part; some assessed the tax at their pleasure; some refused any subsidy even when neighboring provinces granted them; the provinces newly added to the kingdom kept their special regime. Nothing was less uniform than the system of *aides*, and the number of extremely complicated taxes which it included was very large. One of the *aide* taxes was the wholesale (*le gros*), a tax of one twentieth on the sale price, which toward the end of the old regime was collected only on drinks. Another *aide* duty was a tax on the sale price at retail, a rate of one fourth in a few localities and of one eighth in the majority of them. The *aides* included also an unpopular tax which figured prominently in the *cahiers* of 1789, the *trop bu* or *gros manquant*. This was the duty levied on drinks used by the vine cultivators in excess of the quantity fixed for their family consumption, and therefore presumed to have been sold by them without declaration, in evasion of the wholesale tax. It gave rise to house to house searches, against which feeling ran very high when the revolution broke out.

The unpopularity of these *aides* was very great; it is not clear, however, that it was always justified. Ministers who were devoted to the public welfare, such as Colbert, greatly preferred the *aides* to the *taille* and would have

wished to reduce the rate of the direct tax and to raise that of the *aides*. This policy would have been more equitable in a society burdened with special privileges, for although the *aides* themselves admitted of certain very regrettable exemptions, these were far less important than those allowed under the direct tax. The great defect of the *aides* was the confusion to which they gave rise, varying as they did according to locality, and being complicated therefore by a host of vexatious rules. In itself, however, the administration of the *aides* was well conceived; when the law of the 28th of April, 1816, put the tax on drinks in the form that it retained throughout the nineteenth century, it did little more than copy what had been done for the *aides*. For a long time *aides* were included in that group of royal revenues which was farmed out as a unit. In 1780 Necker put them under a separate administration which by 1789 netted the treasury slightly over fifty million livres.

The *cours des aides* were courts of last instance whose jurisdiction extended to the assessment and the levying of only those taxes which were in existence at the time when these courts were established and acquired their power. Consequently they had nothing to do with such imposts as the *capitation*, *dixième* or *vingtième*, which date from the seventeenth or eighteenth century. The word *aides* had thus kept, in this case, the general meaning that everywhere else it had lost. These courts, together with the *parlements* and the *chambres des comptes*, constituted that group of courts of last instance whose officers owned their offices, and which caused so much embarrassment to the crown during the Fronde and throughout the eighteenth century. The spirit that animated the *cours des aides* was very anti-fiscal; they constantly stood out against the improvements that the crown tried to introduce in the field of taxation. Men like Malesherbes (the first president of the *cours des aides* of Paris) were rather rare. Besides the *cours des aides* in Paris there were twelve in the provinces; several of these were identical with the *parlements* or *chambres des comptes* of the cities where they were situated.

MARCEL MARION

See: TAXATION; EXCISE; TAILLE; REVENUE FARMING.

Consult: Callery, A., *Histoire du pouvoir royal d'imposer* (Brussels 1879); Viard, M. J., "Les ressources extraordinaires de la royauté sous Philippe VI de Valois" in *Revue des questions historiques*, vol. xlv (1888) 167-218; Dupont-Ferrier, G., "Histoire et signification du mot 'aides'" in *Bibliothèque de l'école*

des chartes, vol. lxxxix (1928) 53-69; Brunet de Grandmaison, P., *Dictionnaire des aydes* (Paris 1726); Lefebvre de la Bellande, J. L., *Traité général des droits d'aides* (Paris 1760); Moreau de Beaumont, J. L., *Mémoires concernant les impositions et droits*, 4 vols. (Paris 1768-69) vol. iii, p. 277-477. H. Taine gives a colorful, if not always accurate, description in his *Origines de la France contemporaine*, 11 vols. (23rd ed. Paris 1899-1901), tr. by J. Durand, 5 vols. (New York 1896) vol. i (*The Ancient Regime*) p. 349-73.

AILLY, PIERRE D' (1350-1420), educator, theologian, geographer. In 1389 he became chancellor of the University of Paris, where he was the teacher of Gerson. He held positions of considerable importance in the church and in 1411 received the office of cardinal. As a theologian many of his ideas seem adventurous and even heterodox, but he desired above all else a thoroughgoing reform of the church. In the Great Schism he was the first to propose a general council which would be superior to the pope, and hoped by this means to effect a compromise which might solve the difficult problem then facing the church. At the council of Constance he put forth his views for the reform of the calendar which was finally accomplished by Gregory XIII. He is most important, however, as author of the *Imago mundi* (written in 1410, printed shortly before 1487), a summary of the geographical knowledge of the time, based on the ideas of Aristotle and Roger Bacon. It is here that one finds the first references to America. This book was attacked by many authors, but it was highly regarded by Columbus, who became acquainted with it, perhaps, even before his discoveries. D'Ailly's works comprise one hundred and seventy-four scattered monographs of varied importance.

PAUL HARSIN

Consult: Tschakert, P., *Peter von Ailli* (Gotha 1877); Salembier, L., *Petrus de Alliaco* (Lille 1886), and *Pierre d'Ailly et la découverte de l'Amérique* (Paris 1912); Guignebert, C., *De imagine mundi ceterisque Petri de Alliaco geographicis opusculis* (Paris 1902).

AINGO DE EZPELETA, PEDRO. *See* EZPELETA, PEDRO AINGO DE.

AKSAKOV. Sergey Timofeyevich Aksakov (1791-1859) and his two sons Konstantin (1817-60) and Ivan (1823-86) form a triple spiritual constellation occupying an important place in the history of Russian culture. The elder Aksakov was a typical Russian country gentleman. One of the first students of the newly

founded Kazan University, he afterwards was in the government service as censor and educational official. Not until he was approaching the age of sixty did he become a writer of importance. He was not a fiction writer in the strict sense of the word, being a rare specimen of a first class artist who invented nothing but wrote about what really happened and what he himself had lived through. Hence the great, almost exceptional value of his writings as human and social documents. The classical family recollections of Sergey Aksakov give a serene and epic picture of the life of a Russian country gentleman during the later period of serfdom, in the eighteenth and early nineteenth centuries, and more particularly of that manorial colonization, hitherto very little investigated, which played such an important role in the making of Russia. The most important of his works is the famous *Family Chronicle*, of which there exist three English translations: by "a Russian Lady" (Calcutta 1871); by J. D. Duff of Cambridge (3 vols., London 1917); and by M. C. Beverley (London 1924), with introduction by Prince Mirsky.

Konstantin Aksakov was a learned historian and philologist who, however, never did any teaching. Among the so-called Slavophiles (*q.v.*) he was the one who contributed most to the formation of their historico-philosophic doctrine in its application to the facts of Russian history. His general system of ideas shaped itself under the influence of the philosophic ideas of Schelling and Hegel. But that influence was only a passing one, and mainly formal. Having built up his Christian, semi-anarchist ideal of national and social life emancipated from the principle of coercion, Konstantin Aksakov found in the history of Russia a nearly complete fulfilment of that ideal. The essential element in his philosophy is contained in his treatment of the moral problem of social organization. Here he introduces his categories of *Bit* (customs) and *Zemlia* (country or land). *Bit* is a specifically Russian notion more or less corresponding to the German *Sitte*; it denotes the mores of a people not molded by state coercion. A community organized on the lines of *Bit* and embracing the whole nation forms the *Zemlia* which Aksakov opposes to the state. The Slavs who inhabited Russia did not "form the state out of their own midst"; they "called the state from outside" (the "calling of the Varangians," as the starting point of Russian history). The Slavs, and the Russians more particularly, are by their nature "custom"

peoples, this conception of "custom" implying in the eyes of Aksakov not only historical backwardness but a certain moral supremacy over the "state" peoples. Whereas the western nations chose the path of "external law," i.e. of "constitution" and "regulation," the Russian people, being the most Christian of all, followed and will follow the way of "conscience," of "inner truth." "The history of the Russian people is a history, unique in the whole world, of a people that is Christian not only by religion but also by its life, at least by the tendency of that life." It is surprising how Aksakov managed to combine such mystical, unhistorical idealization with an excellent first hand knowledge of the facts which enabled him as historian to utter some sound and critically fruitful judgments. Like the rest of the Slavophiles K. Aksakov believed autocracy, somehow combined with individual rights and consultative popular representation, to be the only form of government suited to the spirit and interests of the Russian people. His original approval of the reform of Peter the Great and his belief in its historical vindication and necessity changed afterwards into a vehement denial of Peter's life work, as well as of the entire "Petersburg period of Russian history" (the expression was coined by him). He regarded it as a pernicious departure from the right path for which the government and the upper classes were to blame. Thus, like all real Slavophiles, K. Aksakov was a preacher of a peculiar kind of social and ethical nationalism, being in practical politics a moderate liberal and a partisan of liberal reforms. Ivan Aksakov, who on the whole faithfully clung to the historico-philosophical and sociological ideas of his brother, regarded the latter's social ideal as in some respects akin to that of the German sociologist W. H. Riehl. The works of K. Aksakov were edited by his brother Ivan in three volumes (Moscow 1861-80); this edition remained incomplete; the first volume, containing the most important historical works, was republished in the twentieth century.

Ivan Aksakov was the practical politician of the Slavophile movement. He had in general a practical mind and great literary and oratorical gifts. At first a government official and a judge (1842-52), he afterwards became and remained a journalist, engaging in economic studies and researches whenever the conditions of censorship reduced him to silence. The significance of Ivan Aksakov lies in the fact that while sharing the ideas of mystical nationalism common to

all the Slavophiles, he yet fought for liberal reforms and was a staunch supporter of the policy of moderate liberalism. I. Aksakov exerted an especially strong influence as chairman of the Slavonic Philanthropic Committee of Moscow during the Russo-Turkish War of 1877-78; because of Aksakov's daring speech against the decisions of the Berlin Congress, the committee was later dissolved and Aksakov himself subjected to persecution. He was a champion of Russia's mission as the liberator of the Slavs from the Turkish yoke, and as such was named in some Bulgarian quarters as a candidate for the Bulgarian throne when the Bulgarian principality was created. In Russian home affairs he of all the Slavophiles was probably the most sober and the best endowed with a sense of realities. There is in the Russian language no better defense of the freedom of speech than Aksakov's brilliant writings on this subject. His letters, a classical example of Russian epistolary literature, have also a great historical documentary value. His verses on political themes give him a prominent place in the history of Russian poetry. Quite a special place in the life work of I. Aksakov is occupied by his investigation into the conditions of trade at the Ukrainian fairs, the results of which were embodied in a large monograph, *Recherches sur le commerce des marchés de l'Ukraine* (St. Petersburg 1858). This classical work of Russian descriptive political economy is full of subtle psychological observations, and among other things contains a very interesting characterization of the "Great Russian" and the "Little Russian" as psychological and economic types. The collected works of I. Aksakov consist of seven volumes (Moscow 1886-87), but that edition is not complete. Three volumes of his *Letters* were published separately (Moscow 1888-92).

PETER STRUVE

Consult: Struve, Peter, "Ivan Aksakov" in *Slavonic Review*, vol. ii (1923-24) 514-18; Masaryk, T. G., *Zur russischen Geschichts- und Religions-Philosophie*, 2 vols. (Jena 1913), tr. by E. and C. Paul as *The Spirit of Russia*, 2 vols. (London 1919) vol. i, ch. ix; Fischel, Alfred, *Der Panlawismus bis zum Weltkrieg* (Stuttgart 1919).

ALABAMA CLAIMS. The *Alabama* claims, settlement of which constitutes an outstanding example of arbitration in a dispute of major importance, arose from the inadequate performance of neutral duties by Great Britain during the American Civil War. Confederate cruisers, equipped in British ports and later armed out-

side British jurisdiction, or whose force was augmented in British colonial ports, inflicted damages on Union commerce estimated at nearly eighteen million dollars and caused the Union navy to spend seven millions in pursuit of them.

In the North great bitterness against England prevailed on this score. Lord Russell refused arbitration in 1865 on grounds of national honor, but his successors at the Foreign Office showed a greater desire to assuage American ill will and, by setting up a higher standard of neutral obligations, a wish to protect British commerce from new *Alabamas* in the event that Great Britain should be a belligerent. The Johnson-Clarendon claims convention of January 14, 1869, contained no expression of British regret but provided for the appointment of an umpire by lot in the case of each claim as to which the commissioners disagreed, if the commissioners failed to agree on one umpire for all the cases. It was rejected by the Senate, forty-four to one, after an extravagant speech by Sumner holding England responsible for the prolongation of the war. Danger of an Anglo-Russian war in 1870, however, led to a confidential mission entrusted to Sir John Rose. This paved the way for a joint high commission which, by the Treaty of Washington, May 8, 1871, referred pending disputes to four separate arbitrations. The British expressed regret for the escape and depredations of the *Alabama* and other vessels, and agreed to refer the claims growing out of the acts of these vessels to a tribunal of five arbitrators which should meet at Geneva and should apply the following three rules, even though the British denied the American contention that these rules stated the principles of international law in force when the claims arose:

"A neutral Government is bound—

"First, to use due diligence to prevent the fitting out, arming or equipping, within its jurisdiction, of any vessel which it has reasonable ground to believe is intended to cruise or to carry on war against a Power with which it is at peace; and also to use like diligence to prevent the departure from its jurisdiction of any vessel intended to cruise or carry on war as above, such vessels having been specially adapted, in whole or in part, within such jurisdiction, to warlike use.

"Secondly, not to permit or suffer either belligerent to make use of its ports or waters as the base of naval operations against the other, or for the purpose of the renewal or augmentation

of military supplies or arms, or the recruitment of men.

"Thirdly, to exercise due diligence in its own ports and waters, and, as to all persons within its jurisdiction, to prevent any violation of the foregoing obligations and duties."

Inclusion in the American case of indirect claims arising from the transfer of American shipping to British registry enhanced insurance premiums, and the prolongation of the war was apparently designed to obtain the rejection of such claims by the tribunal and thus to protect the United States, when neutral, from similar pretensions. As the British held that such claims were barred by the treaty, the tribunal saved the arbitration from imminent shipwreck by excluding the indirect claims from consideration. On September 14, 1872, by a majority of four to one, the tribunal awarded the United States \$15,500,000, including interest, for losses caused by the *Alabama*, the *Florida* and their tenders, and by the *Shenandoah* after her force was augmented at Melbourne. Judgment was in favor of Great Britain in the other cases. Costs of pursuit were excluded as not properly distinguishable from the general expenses of the war.

The decision, however, that "'due diligence' . . . ought to be exercised by neutral governments in exact proportion to the risks to which either of the belligerents may be exposed, from a failure to fulfil the obligations of neutrality on their part," is believed to be a vague and unsatisfactory measure of neutral obligation. It is to be noted that the Hague Rules of 1907, while recognizing the first rule of the Treaty of Washington as expressing a general principle of international law, substituted for the obligation of "due diligence" the duty of employing "the means at its disposal."

Thus the *Alabama* claims served to crystallize a much discussed problem in international law as to the duty of neutrals in preventing not only the outfitting but the building of armed vessels or vessels of war. The subject was of small importance in the days when only small sailing vessels were built and used for naval warfare. The destructiveness of a modern war vessel, however, is so great that it may prove a decisive factor; moreover its sale by a neutral is more readily recognized as an unfriendly act.

JAMES P. BAXTER, 3RD

See: ARBITRATION, INTERNATIONAL; NEUTRALITY; BELLIGERENCY.

Consult: Cushing, Caleb, *The Treaty of Washington*

(New York 1873); Davis, J. C., *Mr. Fish and the Alabama Claims* (New York 1893); Hackett, F. W., *Reminiscences of the Geneva Tribunal of Arbitration* (Boston 1911); Lang, Andrew, *Life, Letters, and Diaries of Sir Stafford Northcote*, 2 vols. (Edinburgh 1890) vol. ii, ch. xii; Selborne, Roundell Palmer, first Earl of, *Memorials*, 4 vols. (London 1896-98) vol. i, pt. ii, chs. x-xii; Wolf, Lucien, *Life of the First Marquess of Ripon*, 2 vols. (London 1921) vol. i, p. 236-71; Moore, J. B., *History and Digest of the International Arbitrations to which the United States has been a Party*, 5 vols. (Washington 1898) vol. i, ch. xiv; Adams, C. F., "Before and After the Treaty of Washington" in his *Lee at Appomattox and Other Papers* (Boston 1902) p. 31-255; *Cambridge History of British Foreign Policy, 1783-1919*, ed. by A. W. Ward and G. P. Gooch, 3 vols. (Cambridge, Eng. 1922-23) vol. iii, p. 54-71; Adams, E. D., *Great Britain and the American Civil War*, 2 vols. (London 1925); Baxter, J. P., 3rd, "The British Government and Neutral Rights, 1861-1865" and "Papers relating to Belligerent and Neutral Rights, 1861-1865" in *American Historical Review*, vol. xxxiv (1928) 9-29 and 77-91.

ALBERDI, JUAN BAUTISTA (1810-84), Argentine political scientist, sociologist, economist and lawyer. He studied in the University of Buenos Aires and received his doctorate in law from the University of Córdoba in 1838. He joined with Echeverría, Miguel Cané the elder and J. M. Gutiérrez in opposition to the dictatorship of Juan Manuel de Rosas and was forced to emigrate to Montevideo (1839), where he continued his propaganda, and thence to Chile, where he developed a reputation for his legal learning and his journalistic efforts. Upon the fall of Rosas (1852) he composed in five days *Las bases*, the best known of his works, an analysis of liberal American constitutions, with recommendations for the new Argentine constitution, which he anticipated. Most of his suggestions were adopted and he became adviser to the new Argentine president, Urquiza, who sent him on a diplomatic mission to England, Spain, France and the Holy See. When Urquiza's confederation was overthrown in 1861 by political combinations in Buenos Aires headed by Mitre and Sarmiento, Alberdi remained in Europe. He died in Paris, a virtual exile. His works on social subjects totaled twenty-four volumes, sixteen of which were published posthumously. His long residence in Europe, in contact with leading minds, made him the most competent of the Argentine social scientists of his day, while his ability and liberalism made him the idol of the generation of political thinkers that followed him.

L. L. BERNARD

Important works: *Las bases* (Valparaíso 1852); *Sistema*

económico y rentístico de la Confederación (Valparaíso 1854); *Estudios económicos* (Buenos Aires 1895); *Peregrinación de Luz del Día* (a Utopian romance) (Buenos Aires, n.d.); *Ensayos sobre la sociedad* (Buenos Aires 1898); *El crimen de la guerra* (Buenos Aires 1915), tr. by C. J. MacConnell (London 1913).

Consult: Bernard, L. L., "Development and Present Tendencies of Sociology in Argentina" in *Social Forces*, vol. vi (1927-28) 13-27; García Mérou, Martín, *Alberdi* (Buenos Aires 1916); Pereyra, Carlos, *El pensamiento político de Alberdi* (Madrid 1919); also biographical introductions to Alberdi's works (La Cultura Argentina edition) (Buenos Aires 1915-).

ALBERONI, JULIO (1664-1752), a cardinal and prime minister of Spain from 1715 to 1720. He was born of poor parents in the duchy of Parma, and after entering the priesthood rose rapidly to prominence. Alberoni was introduced to the court of Philip V through the French general, Marshal Vendôme, at the time when French dominance in Spanish councils was being maintained through the influence of the celebrated Madame des Ursins. Alberoni successfully induced her to sponsor the marriage of Philip V to Elizabeth Farnese (Isabel Farnesio), who later earned her title, the "Termagant of Spain." Backed by the determined queen, Alberoni managed to become head of the ministry and from that position was eventually elevated to the rank of cardinal.

He found Spain at the lowest ebb of her political fortunes, but he was so competent an executive that under his administration Spain became again a first rate factor in European affairs. He introduced important changes in the fiscal system, encouraged the manufacture of woollens and linens, enlarged the navy and strengthened fortifications. These internal reforms were a necessary prelude to the ambitious role which Alberoni had decided that Spain should play in Europe.

The inspiration of his foreign policy remains somewhat enigmatic, but it has been conjectured that as a patriotic Italian he hated the emperor for having made Italy the battle ground of Europe, and looked toward the aggrandizement of Spain in order that its splendor might insure the peace of Italy. He spread a remarkable net of secret intrigue in all the courts of Europe in furtherance of his plans to secure alliances for Spain. Finally, assisted by the great organizer Patiño, he sent Spanish forces to Sardinia in 1717 and to Sicily in 1718, overrunning both. This aroused a storm in Europe and produced a coalition of England, France and Austria; the kingdom of Sardinia eventually

forced Spain to yield her conquests and to dismiss her minister.

In a sense Alberoni had failed, but he had in fact started that movement of regeneration in the peninsula which was to culminate in the reign of Charles III (1759–88). In his later years he drew up plans for a Diet of Perpetual Peace, advocating a European league of the Christian nations. These ideas of one of the greatest exponents of secret diplomacy in its most exaggerated form were in their time, perhaps, not inconsistent with an ultimate objective aiming at the general pacification of Europe.

CHARLES E. CHAPMAN

Consult: Ballesteros y Beretta, Antonio, *Historia de España y su influencia en la historia universal*, vols. i–v (Barcelona 1919–) vol. v, p. 48, 118–19, which gives an extensive bibliography. Of the recent works in English see Vesnich, M. R., "Cardinal Alberoni, an Italian Precursor of Pacifism and International Arbitration" in *American Journal of International Law*, vol. vii (1913) 51–82.

ALBERTI, LEON BATTISTA (1404–72), Italian humanist, born in Venice of an illustrious Florentine family. A man of universal interests, his work as an author, scientist, moralist, economist and aesthetic philosopher was distinguished by clear judgment and good taste, which also guided him in the practise of the arts of music, painting, sculpture and architecture. His life was one of industry and concentration and, possessed of a strong sense of reality, he achieved a happy equilibrium between the useful and the ideal, between scientific precision and free imagination, and between the demands of the ego and those of social consciousness.

Alberti's educational ideal differed from that of the fifteenth century, in which literary culture was considered equivalent to a knowledge of humanity (Petrarch, Vittorino, Vergerio, Vegio, Filelfo, etc.). The struggle with fate, the necessity of feeling God in his own nature, were the realities of man's existence and were far removed from the life of the man of letters, whom Alberti regarded as being a naïve child—the eternal pupil. He expressed this contrast in striking fashion in his first great satires on the literary man, the theologian and the scholar; the man of action is contrasted with the *littérateur*, and the reality of a life of activity in which the will is directed to the cultivation of virtue and of the art of life is opposed to the concept of human culture as study dependent upon erudition and

memory. He advised the aristocrat to educate his son for some occupation such as agriculture, navigation or the crafts rather than for the empty life of a literary dilettante. Life is an art, and art in this larger sense is the result of active practise. The proper direction of a family is the highest art. The perfect school is that which is directed by experts; education culminates in self-control, and the perfect society is the society of the self-controlled.

GIUSEPPE LOMBARDO-RADICE

Works: *Opere volgari*, ed. by A. Bonucci, 5 vols. (Florence 1843–49); *I libri della famiglia*, ed. by G. Mancini (Florence 1908); *I primi tre libri della famiglia*, ed. by F. C. Pellegrini (Florence 1913); *Opera inedita et pauca separatim impressa*, ed. by G. Mancini (Florence 1890).

Consult: Mancini, G., *Vita de L. B. Alberti* (Florence 1882); Brunelli, Valina Benetti, *Leon Battista Alberti e il rinnovamento pedagogico nel quattrocento* (Florence 1925); Voigt, G., *Die Wiederbelebung des classischen Alterthums*, 2 vols. (2nd ed. Berlin 1880) vol. i, p. 372–79; Gerini, G. B., *Gli scrittori pedagogici italiani del secolo decimoquinto* (Turin 1896) p. 149–204; Woodward, W. H., *Studies in Education during the Age of the Renaissance, 1400–1600* (Cambridge, Eng. 1906) ch. iii.

ALBERTUS MAGNUS (1206–80), theologian and philosopher. While his father, a powerful feudal noble, was at war with Lombardy he was sent to study at Padua, where he joined the Dominican order (1223). He studied and taught theology at Cologne and at various Dominican monasteries, and in 1245 went to Paris to occupy one of the Dominican chairs in theology. Thomas Aquinas studied under him at Paris and returned with him to Cologne (1248), where Albertus was to establish a *studium generale*. Together with Aquinas and Peter of Tarentasia he drew up the regulations governing studies in the Dominican order (1259). He was made bishop of Ratisbon (1260–62), accepting the post against his wishes in order to indicate his obedience, and resigning it after having shown his incapacity for a decent period. After the death of Thomas Aquinas he traveled to Paris to defend the doctrines of Thomas from the attacks of the bishop and the clergy (1277).

Albertus' project was to write a work for every work Aristotle had written or had planned. The completion of that encyclopaedic task introduced to western Europe for the first time a body of positivistic knowledge modeled on the sciences of the Greeks. In the course of his labors Albertus wrote an *Ethics* and a

Politics which made readily available the social theory of Aristotle, and reenforced with a body of theory the emphasis placed in Christian ethics and canon law on importance of habituation in the virtues and on consent in law. It was Thomas who synthesized and systematized the vast and diverse materials which Albertus had assimilated.

RICHARD MCKEON

Works: *Opera omnia*, ed. by A. Borgnet, 38 vols. (Paris 1890-99).

Consult: Thorndike, L., *A History of Magic and Experimental Science*, 2 vols. (New York 1923) vol. ii, p. 517-92; Lottin, Odon, *Le droit naturel chez Saint Thomas et ses prédécesseurs* (Bruges 1925); Feiler, W., *Die Moral des Albertus Magnus* (Leipzig 1891).

ALBUQUERQUE, AFFONSO DE (1453-1515), Portuguese soldier and statesman, founder of Portugal's Indian empire, one of the earliest advocates of commercial imperialism and of preparedness as the means to prevent war. The aim of his conquests as governor general of India (1509-15) was the Portuguese monopoly of Indian commerce. To effect this he determined to control the source of supply by occupying the principal Indian ports from Malacca westward and to prevent all Mohammedan commerce with Europe by policing the Red Sea, especially at Aden, its southern entrance. His Red Sea expedition failed, but at the time of his death Portugal was strongly entrenched in Malacca, Ormuz, Calicut, Cochin, Cannanore, Goa, and was on friendly terms with the East Indian kingdoms and with Siam, China and Java.

Since eastern commerce was almost entirely in the hands of the Mohammedans, to destroy it was also to spread the gospel. To this end Albuquerque allied himself with Hindoo princes. He appointed Hindoos to minor administrative positions and attempted to establish schools to educate them in western customs and language. Hindoo women were married to Portuguese men in a consistent attempt at permanent colonization. Albuquerque was not deficient in cruelty yet he prohibited suttee in the island of Goa; and he restored the original tax levy which had been doubled by a previous conqueror. The Hindoos said of him when he died "that God had need of him for some war and had therefore sent for him."

CLARA W. MAYER

Consult: Stephens, H. Morse, *Albuquerque in Rulers of India* series (Oxford 1892); *Commentarios do grande*

Afonso Dalboquerque, 2 vols. (Lisbon 1774), tr. by Walter de Gray Birch as *The Commentaries of the Great Afonso Dalboquerque*, 4 vols. (London 1875-84); *Cartas de Afonso de Albuquerque*, Collecção de monumentos in editos para a historia das conquistas dos Portuguezes em Africa, Asia e America, series 1, vols. x, xii-xvi (Lisbon 1884-1915).

ALCABALA is a turnover tax which exerted considerable influence in the economic development of Spain. It has a very long history. A successful complaint on the part of some Spanish communities against the dishonest farming out of the alcabala by the praetors is recorded as early as 171 B.C. An inscription indicates a turnover tax of one half percent in Baetica at the time of Augustus. Coimbra had a turnover tax in 734. In documents of the twelfth century the alcabala is mentioned as a community tax, corresponding to earlier regulations in Greece, Macedonia and Rome, and to a contemporary development in Germany, France and the Orient (Mecca).

Through its reintroduction in 1342 the alcabala became generally significant. The Cortes of Castile in Burgos and the Cortes of León granted it to Alfonso XI (1312-50) in the form of a 5 percent tax on all goods in Castile and León, i.e. on all business turnovers, from producer to consumer, on condition that it be in force only during the siege of Tarifa and Algeciras. The alcabala retained its character as both war tax and special tax during the fourteenth century, as is evidenced in the levy by the Cortes of Alcala for the siege of Gibraltar (1349). Beginning with 1366 the tax rate was 10 percent, and after a temporary reduction it rose to the same amount under Ferdinand V and Isabella of Castile (1474-1516) and under Philip II (1556-98). The Spaniards began to introduce the alcabala into the kingdom of Naples and into their American colonies in 1558. An attempt to introduce it into the Netherlands, however, met with failure in 1571.

Philip IV increased the rate on the last turnover by 1 percent successively in 1642, 1656 and 1664; henceforth until about 1785 the rate was 11 percent for the retail trade, the charge on other business turnovers remaining at 10 percent. From 1785 on, the general rate on the necessities of life was lowered to 2 percent; moreover the tax was made payable only for the first sale, all subsequent transfers being made free of tax. The alcabala acquired thus the character of a production tax.

To avoid the difficulties of administration the

kings made tax agreements (*encabezamiento*) with the communities (1494, 1509, 1513, 1537, 1556), according to which the latter had to pay in each case stipulated lump sums that were raised by means of the alcabala administered by them. The amount payable to the king was calculated in such a way that the actual total burden of the alcabala, making allowances for exemptions, did not amount to more than 5 percent. Owing to laxity in administration the yield declined to 2 or 3 percent, but the administration improved and the yield increased under Philip II. This caused the cities to oppose the *encabezamiento* procedure. Charles V attempted to avoid this difficulty first by abolishing this method of collection, then by extending it to all taxes and in 1523 by substituting a head tax for the alcabala. The ensuing changes in the amounts payable to the king produced a total tax burden of 7 percent from 1562 to 1576, 20 percent from 1576 to 1584, 15 percent from 1584 to 1595, and 7 percent again in 1620 and afterwards.

As a rule the payment of the tax was shared equally by sellers and buyers. Confirmation by oath of the accuracy of tax statements was sometimes demanded and severe penalties were imposed for inaccurate statements, fraudulent bookkeeping or tardy payments. At first there were no exemptions, but later certain classes of persons and the sale of certain types of commodities were exempted. The persons exempted included the king and his household, many of his artisans, certain monasteries, castles and settlements, officers of the Inquisition, the nobility and some others. Except in connection with purely business transactions, the clergy were exempted. Certain prelates enjoyed the same privilege in selling the products of their orders' benefices. Transactions in saddle animals, books, manuscripts, paintings, hawks and other hunting birds, slaves imported from Moorish territory in war time, cattle, weapons, certain cloths, bread, money, wedding presents, legacies, fir wood for the royal wharves in Seville were all exempted.

The economic disadvantages of the alcabala were reflected in the acuteness of the conflicts over the rate and the lump sum agreements. They were accentuated by the nature of the exemptions and by the system of farming out the taxes, which allowed the tax farmer far reaching authority and which lasted, with interruptions, until 1747. There were numerous attempts at reform. So important had the problem become

that Queen Isabella in her will ordered a commission, which, however, was never created, to investigate the legality of the alcabala. In the eighteenth century the opposition was active in the textile industry in particular, but it was also carried on by individuals (as in the memorandum of Don Miguel de Zabala to Philip V in 1734). It was difficult to dispense with the alcabala; even although inefficiently administered it was a highly productive tax, so that the decrease in revenue resulting from its abolition could scarcely be compensated by other taxes. The radical changes of 1785 foreshadowed the final abolition of the alcabala by the decree of June 20, 1843, and, after its temporary reintroduction, by the federal law of May 23, 1845. The name is retained today only in connection with special transfer taxes such as the tax on real estate.

It has been thought that the alcabala retarded and inconvenienced trade and restricted production for distant markets, and it has been considered the cause of the ruin of manufactures in Spain. Some writers, especially in the eighteenth century, have even maintained that the alcabala was the sole or principal cause of the downfall of Spain. However, for lack of sufficient evidence one would hesitate to ascribe this event to any single cause. Economic greatness is a function of too many variables—political, cultural, technological—to be so completely affected and determined by a single feature of governmental policy.

ROLF GRABOWER

See: SALES TAX; BUSINESS TAXES; REVENUE FARMING.

Consult: Grabower, Rolf, *Die Geschichte der Umsatzsteuer und ihre gegenwärtige Gestaltung im Inland und im Ausland* (Berlin 1925) p. 147-62, 275-80; Espejo, Cristóbal, "El encabezamiento de Madrid por alcabalas, de 1547 a 1556" in *Revista nacional de economía*, vol. xxvii (1928) 3-26 and 193-216; Colmeiro, Manuel, *Historia de la economía política en España*, 2 vols. (Madrid 1863); Goury du Roslan, Jules, *Essai sur l'histoire économique de l'Espagne* (Paris 1888).

ALCHEMY. An art of solitary adepts working in secret under the lure of great personal gain, alchemy has always remained in a stage of uncertainty and suggests the somewhat confused mental attitude of the would-be inventor who has not yet succeeded in working out his idea and making it practical. At various times and places it has been illegal, or at least the object of hostile legislation and moral criticism. If it did not originate in, it has been associated

with, the fraudulent practises of workers in metal, the making of imitation or artificial gems, counterfeiting, medical quackery and the magic arts (for specific illustrations of magic in alchemy see L. Thorndike, *History of Magic and Experimental Science*, 2 vols., New York 1923). At the same time it has closely accompanied the social service rendered by medicine and technology, and has antedated modern chemistry. It has not merely been a social fact with which we must reckon through a long period of history; it is still extensively practised and credited in Egypt and the Near and Far East.

Alchemy finds its place in intellectual history as a delusion, more learned and technical than popular, based upon or enveloping the fact, imperfectly apprehended, of chemical change. With this sound foundation and scientific center of interest, alchemy could not go wholly wrong in its aberrations or fail to stumble occasionally upon new facts of nature or useful processes. The modern scientific laboratory is in no small measure an outgrowth of the mediaeval alchemist's workshop. Because of this element of truth and the rational purposiveness and practical character of much of alchemy's procedure, such as distillation and sublimation, one hesitates to classify it as an occult science or form of superstition. But when the alchemist takes pen in hand, he is likely to begin with as large promises and startling announcements as a circus poster, to continue as fluently as a longwinded preacher, only to terminate in cryptic and enigmatic evasions. He often employs religious phraseology and reasoning, alludes to initiations and mysteries, makes much use of allegory and symbolism. On the other hand it is hard to draw any fast line between the recipes of alchemy and those of the arts, since they are found in the same treatises and authors. Alchemical theory had relations with philosophy and perhaps originated in the discussion of world grounds and the constitution of matter by the early Greek thinkers. Mediaeval alchemists related their argumentation to the philosophy of Aristotle, with further touches of neo-Platonism, mysticism and especially the astrological hypothesis that things terrestrial are governed by things celestial. Perhaps the earliest explicit association of seven metals with the planets is in the account of Persian Mithraism by Celsus, the second century foe of Christianity (see Origen, "Reply to Celsus,"

in *Ante-Nicene Fathers*, 10 vols., Buffalo 1887-96, vol. iv, p. 583).

The earliest extant alchemical writings, however, are in Greek from about the third to the fifth century. Zosimus was alchemist as well as historian. The authors of these treatises regard their art as descended from ancient Egyptian kings and priests, and there are other reasons for tracing alchemy back to Egypt or for assuming a strong influence of Egyptian thought and ritual upon alchemy, perhaps indirectly through gnosticism. A recent Greek writer has placed the birth of alchemy rather late in Egyptian history, at 718 B.C. during the Ethiopian invasions (see M. Stephanides, "La naissance de la chimie" in *Scientia*, vol. xxxi, 1922, 189-97). But Julius Ruska, in a still more recent detailed study of the Emerald Table ascribed to Hermes Trismegistus, finds signs of a strong Persian influence.

Although alchemical writings in Greek run into the Byzantine period, and technical recipes in Latin continue in unbroken tradition through the early Middle Ages, it was especially by translation of works in Arabic that alchemy spread in western Europe from the twelfth century on. Berthelot regarded Arabic alchemy as fantastic and magical compared to later mediaeval works in Latin. But the recent investigations by such scholars as E. Wiedemann, E. Darmstaedter, H. E. Stapleton and E. J. Holmyard in Arabic manuscripts and sources have rehabilitated Jabir ibn Hayyan as one of the greatest figures in the history of alchemy, and brought out the positive experimental contribution of Arabic alchemy.

The generalization may nevertheless be hazarded that alchemy grows less magical and more scientific as we advance through mediaeval to modern times. The use of minerals, metals and chemicals in medicine may be traced back earlier than Paracelsus and the iatrochemists of the sixteenth and seventeenth centuries. Learned men such as Conring, Libavius, Ashmole and Sir Hans Sloane, founder of the British Museum in 1753, and even such scientists as Stahl and Boyle, retained faith or at least interest in the possibility of transmutation.

This was a speculative or scientific interest rather than a craving for lucre. Possibly the scarcity of capital before modern times may have motivated the activities of alchemists, but success on their part is seldom recognized in past literature outside of their own propaganda. Diocletian is said to have burned the books of

the alchemists in Egypt because their activity had financed revolts against him, but one recalls more allusions to persons who lost their gold by employing alchemists in the effort to multiply it. In the fourteenth century the inquisitor Eymeric declared that alchemists come under the censure of divine law as intent on gold, and accused them of defrauding even the poor. On the other hand both Franciscan friars and Rhenish archbishops are listed prominently among devotees of the art.

LYNN THORNDIKE

See: MAGIC; SUPERSTITION; PHILOSOPHY; SCIENCE; MEDICINE.

Consult: GUIDES: Borel, P., *Bibliotheca chimica; seu catalogus librorum philosophicorum hermeticorum usque ad annum 1653* (Paris 1654); International Union of Academies, *Catalogue des manuscrits alchimiques grecs*, ed. by J. Bidez, F. Cumont, J. H. Heiberg and O. Lagercrantz, vols. i-iii, v-vi (Brussels 1924-28); Singer, D. W., and Anderson, A., *Catalogue of Latin and Vernacular Alchemical Manuscripts in Great Britain and Ireland Dating from before the Sixteenth Century* (Brussels 1928); Carbonelli, G., *Sulle fonti storiche della chimica e dell' alchimia in Italia* (Rome 1925).

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ALCIATI, ANDREA (1492-1550), Italian jurist, who played a leading part in the revival of the study of Roman law and in the reestablishment of its authentic texts during the humanist movement of the sixteenth century. He held successive chairs of law at various Italian and French universities, wandering to

and fro at the invitation of sovereigns or as a result of local strife and the tumults of war. His lectures drew large audiences, including distinguished scholars and aspiring social and religious reformers from many countries; his numerous writings soon exercised a profound influence on the development of legal science in Europe. He was in constant touch with the general reform and renaissance movement, and was closely associated with such men as Erasmus, Bembo, Sir Thomas More, Zasius, John Calvin, Theodore Beza, Vasari and J. Amyot. He admired Luther's ardent courage, but deplored his invective and rough manners. He never abandoned Catholicism, though he disapproved of the license at the papal court, superstitious belief and any violent assertion of authority.

Alciati's works, which are inevitably fragmentary, represent the lifelong strivings of a keen explorer, the critical views of an untiring controversialist, and the reconstructive conceptions of one who sought to separate the true from the false (which had been mixed up for centuries), the trivial and irrelevant from the significant and material. His aim throughout was to show the real meaning and application of the Roman law, and to liberate it from its destructive incubus of spurious additions and erroneous interpretations by preceding glossators and commentators: that is to say, his purpose was not merely analytical and expository, but—what was of supreme importance then—historical and comparative, based on the true original sources.

As a humanist he held, contrary to many contemporary jurists, that he who would be a sound lawyer should not limit himself to the study of law but should devote himself also to history, literature, philology, political science and other ancillary subjects. In the search for truth he set knowledge and independence of thought over against unreasoning tradition and dogmatic authority; and he regarded a jurist as a priest in the service of justice. He is a founder of the scientific method in jurisprudence, and to him is due the rise of the great French school of law in the sixteenth century.

COLEMAN PHILLIPSON

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ALCOHOL.

HISTORICAL ASPECTS. Alcohol has been used by mankind since the remotest antiquity, and its use has extended over virtually all parts of the earth. Its principal significance for the history of culture arises from its use as a beverage.

It is convenient and customary to classify alcoholic drinks as beers, wines and distilled liquors. Beer is produced by the fermentation, aided or unaided, of grains or roots. Virtually every cultivated cereal known to man, and many roots, appear to have been in use for beer making. To judge from its distribution, the making of beer may be considered to have originated relatively early among some agricultural group of the Old World and to have spread throughout the agricultural cultures of the Old World and most of those of the New World. Non-agricultural hunters, mere gatherers of wild grains and roots, such as the wild rice gatherers of the Great Lakes region of North America, the root gatherers of northwestern North America and the aboriginal Australians, have no knowledge of beer making. The agriculturists of North America, save in the Pueblo region of the Southwest of the United States, had no knowledge of beer; neither, apparently, had the agricultural Melanesians and Polynesians.

The problem concerning the appearance of beer making in America has not yet been settled, although the idea of diffusion is strongly supported by the distribution in America, Oceania and southeastern Asia of the masticatory preparation of beer and kava (the latter a non-alcoholic drink). Mastication of starchy grains and roots through the action of the saliva facilitates the conversion of the starch into sugar, and consequently hastens the fermentation. In Formosa and southeastern Asia rice flour is masticated by women in the preparation of rice beer. In Polynesia (but not Melanesia) the pepper root is masticated in preparation of kava by both men and women. The saliva aids in releasing the active alkaloid. Throughout the range of maize and manioc culture in the Americas, except in non-Puebloan United States, maize flour or manioc root is masticated by women in preparation of maize or manioc beer. In Mexico peyote was thus masticated in the preparation of a non-alcoholic beverage. This and kava preparation are perhaps interesting examples of a process taken from one complex and transferred to another.

Wines are the fermented juices of stems (such as sugar cane and palms), of fruits (such as the

grape), of flowers or of berries. Mead—fermented honey—may be classed as a wine, and also kumiss—fermented milk. Grape wine is peculiar to the grape growing region surrounding the Mediterranean. Palm wine is universal in agricultural Africa, around the Indian Ocean littoral, and in the agricultural Americas except north of Mexico. In Mexico sap from the flower stalk of the agave (century plant, or aloe) was used to make wine (pulque). Mead and kumiss appear to be correlated in distribution and may be presumed to have originated among the pastoral peoples of the central Eurasian plains. Both of these aberrant forms of wine were used throughout Europe (even in Iceland and Lapland) and western and central Asia; and among the Kaffirs of South Africa (to whom they spread, no doubt, with cattle domestication). The Chinese, Japanese and southeast Asiatics will not use milk or milk products and consequently have never adopted kumiss. Non-agricultural and non-pastoral races do not use wild berries or fruits for wine making, and all forms of wine may be considered to be, with beer, originations of some agricultural people.

The history of distillation is very obscure. From the available data it may tentatively be considered to have been invented for non-beverage purposes by the alchemists shortly before our era and then applied to the distillation of wines and beers. Distillation was perhaps first used to produce distilled alcoholic beverages in India about the beginning of our era; it spread thence throughout Europe and Asia in the first millennium of our era, and in the second half became world wide; it spread even to primitive peoples such as the North American Indians, who had previously not known even wine or beer. Thus it appears that the use of beers and wines is correlated with the distribution of advanced primitive culture; and the distribution of distilled liquor is correlated with higher civilization and its spread.

One might expect to perceive in history evidence of physical and cultural disintegration, at least among groups where there has been widespread use of governmentally uncontrolled and therefore imperfectly performed distillation of strong liquors. But even in the case of mediaeval Japan (*cf.* Morewood) and of Ireland and Scotland of the past several centuries, where there was such a widespread use of badly distilled illicit whiskey, we witness the development of populations of more than average health and physical vigor. In contrast to the

peoples just mentioned we witness in history the physical and cultural recession of the Hindoo and Moslem peoples who have measurably reduced alcohol consumption through prohibitory legislation. However, conclusions from history as to the racial benefits of alcoholic consumption are difficult to draw.

Social history evidences repeated opposition on the part of the organs of social control of various groups to the abuse of alcoholic beverages. Usually the opposition to their abuse has led to their prohibition. And it is a striking fact that, until the recent prohibition in Russia and the United States, all prohibitory legislation has been among wine drinking nations. It is furthermore a striking fact that all prohibition has been a failure, the effect having been only to increase social hypocrisy and to augment the use of liquors distilled without governmental supervision or commercial standardization and therefore containing poisonous by-products of imperfect distillation, with consequent menace to the public health.

Hindoos have been forbidden the use of alcoholic beverages since late Vedic times. In the later *Smritis* the manufacture, transportation, giving, sale, acceptance or use of any alcoholic beverages was a capital offense. The laws of Manu required suicide of any Brahman touching liquor. Even using a wine bottle for water was a sin and a penal offense. Hindoo prohibition for two thousand years has been ignored by the lower classes and only nominally obeyed by the upper classes. Even the Brahmans have always drunk secretly. Breath purifiers were and are used to conceal the universal hypocrisy. Some important Hindoo cults even drink openly, but before drinking they recite a formula over the liquor to secure advance absolution for the sin of drinking it.

Mohammed forbade all use of alcoholic beverages to all Moslems, but alcohol has been stronger than the Koran and, save for several small fanatical sects, all Moslems have drunk, some openly, some secretly, some moderately, some to excess.

The Aztec cities of ancient Mexico had prohibition laws which permitted the use of alcoholic beverages only to the sick and aged, to hard workers in the building trades, and on festal occasions to the common people. There was much infringement of the law, but available data seem to indicate that it may have had some measure of success. In Incaic Peru there was prohibition only of the use of one particularly

intoxicating beer (the *sora*). In ancient China and the ancient Mediterranean region there were several minor sporadic attempts at prohibitory legislation, short lived and unsuccessful.

In the movements of frontiers during the modern period (since the initiation, about 1450 A.D., of the establishment of direct European contacts with the relatively primitive peoples of Africa, Oceania and America), we are able to witness the effect of the introduction of distilled liquors among peoples who previously were ignorant of them—even, like the North American Indians and Polynesians, ignorant of wines and beers. A resumé of the facts shows that the effect was initially disastrous but that the native peoples were gradually able to develop control over their appetites and moderate their consumption. The Polynesians and North American Indians, it is true, have virtually died off, but this has been due to the operation of factors which were chiefly economic; the Indians of Latin America and the Negro in Africa and America have become adjusted socially to alcohol and are increasingly vigorous and prolific.

Economically alcoholic drinks have not played a very significant role in history. Their bulk in relation to value has been such, considered along with the fact of the universal prevalence of raw materials from which they may be manufactured, that transportation costs make economically unprofitable inter-group trade in any but local specialties desired by the rich for variety's sake. As an element in consumption economically considered these drinks have been more significant, but their economic importance is reduced by the fact of their cheapness considered in relation to the cost of other foods or indulgences and in relation to the amount an individual may regularly consume. It is true that the drinks are often made costly by state taxation and the total national expenditure on them is relatively great, but much of the price paid by the consumer is then properly chargeable not to the consumption of alcohol but to contribution to the public treasury.

W. C. MACLEOD

BIOLOGICAL ASPECTS. The reasons why mankind has used alcoholic beverages so long and so universally may reasonably be presumed to be basically two in number. In age long experience mankind has found that, in general, alcoholic beverages are pleasant rather than painful in their physical and psychic effects upon the organism and useful to the physiologi-

cal (including the psychological) economy to a degree which throws the balance on this score in their favor. If in the common sense of mankind alcohol as a beverage had been found to be unpleasant, useless or necessarily and inevitably harmful, its use in this way would have ceased centuries ago.

Dodge and Benedict have pointed out that at the present time millions of people regularly obtain a somewhat larger proportion of their total energy requirement from alcohol than they do from proteins. Alcohol in moderate amounts is almost completely oxidized or burned in the human body, yielding energy available for use in muscular work and in the maintenance of body temperature. This fact, by definition, makes alcohol a food. It can within limits replace equivalent amounts of fats and carbohydrates in the diet, and within these limits can spare protein in the same way that fats and carbohydrates can. Richter, in a remarkably thorough, long continued and critical piece of research, has demonstrated that rats which took alcohol ate from 16.9 to 35.6 percent less than controls which drank pure water. In spite of the fact that they ate so much less they grew just as rapidly and reached the same body weight at maturity as the controls. Under conditions of nearly equal activity the energy of the alcohol, calculated in calories per kilogram body weight, exactly counterbalanced the decrease in energy intake. The conclusion was drawn that, in the rat, alcohol not only replaces isodynamic quantities of food in maintaining energy balance, as was demonstrated in man by Atwater and Benedict, but it is also used for growth and development.

In its normal use as distinguished from its abuse alcohol has been important sociologically in two ways. The first of these is as food. The present day nutritional habits of the populations of the wine and beer drinking countries of Europe perfectly illustrate the importance of alcohol in this respect. The second way has been as a facilitating agent to social relations between human beings. Alcohol in ordinary doses is a mild narcotic, of rapid action because it is extremely diffusible and passes easily through all animal membranes. It thus brings about quickly a diminution of function of the neural mechanisms of the highest level in the cerebral cortex. Starling has well described the resulting effects upon behavior: "The self-consciousness and preoccupation of each man with his own affairs become lessened. He is more

receptive of the moods and interests of his companions. His emotional responses are more readily aroused; the solemn man unbends, the critical becomes charitable and sympathetic, the silent man more loquacious. Each man thus not only reveals himself more to his fellows but is more ready to appreciate the merits and conversation of those around him. In a word, the use of alcohol in moderation promotes good fellowship" (*The Action of Alcohol on Man*, p. 77). The collective experience of mankind has demonstrated that such forms of behavior favor social intercourse and relations.

When alcohol is taken in excessive doses its narcotic action extends from the highest neural levels to those lower and lower. If the amount taken is sufficient the personality of the individual may become completely disorganized, and death may result from the acute toxic effects of the alcohol. In the successive stages of disorganization of the personality by alcohol, the individual tends progressively to become a nuisance and potentially a menace to society, precisely as would be the case if a similar physiological and psychological alteration were brought about by any other agent.

Although in its action on the nervous system alcohol is a narcotic, its action on the biological function of growth appears generally to be stimulating. For example, Puri showed that low concentrations of ethyl alcohol in the nutrient solutions in which barley seedlings were grown had a definite stimulating effect. Pearl and Allen found that cantaloupe seeds, soaked in solutions of ethyl alcohol up to 12 percent concentration, made better seedling growth than controls soaked in pure water. Mast and Ibara found that tadpoles in weak solutions of alcohol not only lived longer than the controls but grew much larger in the same length of time; so much so that the superiority was apparent at a glance and required no elaborate measurements for its demonstration. But these findings are of purely biological interest.

As far as man is concerned there are two aspects of the problem of the biological effects of alcohol which are of direct sociological import: first, the effect of alcohol upon longevity; and second, the racial effect of alcohol. The experience of insurance companies has long been cited as demonstrating that the use of alcoholic beverages of any amount or kind shortens the duration of life, as compared with total abstinence. This evidence, however, cannot be taken as conclusive regarding the point of real interest,

namely moderate use as contrasted with abuse, because no insurance records have made possible a distinction between moderate drinkers and heavy drinkers. An extensive and critical study of this problem has been made by Pearl, using specially collected and reliable material. The results regarding expectation of life are shown for males in the following table:

EXPECTATION OF LIFE, IN YEARS, IN THE SPECIFIED GROUPS OF MALES

AGE	ABSTAINERS	MODERATE DRINKERS	HEAVY DRINKERS
30	36.34	36.75	28.57
35	32.69	33.22	26.31
40	29.06	29.69	22.41
45	25.47	26.21	19.85
50	21.99	22.84	17.57
55	18.64	19.60	15.51
60	15.49	16.56	13.61
65	12.58	13.75	11.83
70	9.97	11.21	10.13
75	7.71	8.96	8.45
80	5.90	7.01	6.78
85	4.55	5.35	5.18
90	3.44	3.99	3.88
95	2.54	2.90	2.83
Person-years exposed to risk in the group	21,594.0	43,011.5	24,371.0

The data show two things: first, that heavy drinking in this group of people, as compared with either total abstinence or moderate drinking, definitely reduces the expectation of life at all ages from thirty to seventy; and second, that moderate drinking in the group studied did not reduce the expectation of life, at any age from thirty on, below that of abstainers.

When, however, both moderate and heavy drinkers in this experience were combined to form an "all drinker" class and this combined class was compared with the total abstainer class, it was found that at all ages up to seventy the death rates were higher for the drinker than for the abstainer group. This is the same thing that general insurance data show. These results again demonstrate the importance of a clear distinction between the normal moderate use of alcoholic beverages and their abuse.

The racial effect of the use of alcohol has been extensively studied. The important net results of the considerable body of careful, painstaking experimental research with lower animals which has been concerned with this problem lead to several significant conclusions. First, the racial effect of alcohol is preponderantly beneficial or, at the worst, not harmful. This is true for characters depending upon

general vigor in guinea pigs (after early generations are passed), fowls, rats, mice, rabbits, insects and probably frogs. Second, this beneficial racial effect appears to be the result primarily of the fact that alcohol acts as a definite but not too drastic selective agent upon both germ cells and developing embryos, eliminating the weak and leaving the strong. Third, there are only three racial effects of alcohol which can possibly be regarded as harmful that have yet been brought to light by this mass of experimental work. The first is the production of defective offspring in early generations by alcoholizing guinea pigs (Stockard). This result is peculiar to the guinea pig and was not found even for that animal by Pictet. No such effect has been noted in any other animal: not in the fowl (Pearl, Danforth); rat (MacDowell, Hanson); mouse (Gyllenswärd, Nice, Bluhm); rabbit (Rost and Wolf); frog (Bilski); or various insects (Pictet, Harrison, Mann). The second is a possible slight reduction in activity and ability to learn among the offspring of alcoholized white rats (MacDowell). The third is a reduction in fertility following the administration of alcohol. This, however, is one element of a selective process which ultimately is beneficial to the race.

Comparatively little critical work has yet been done on the racial effect of alcohol upon man. But the most thorough and significant investigation which has been made in this field (Polisch) shows that in a group of very heavy, steady drinkers there was not the slightest evidence of demonstrable germinal injury of the offspring.

RAYMOND PEARL

ALCOHOLISM. The problem of alcoholism arises from the results, individual and social, that follow the excessive consumption of alcoholic liquors. Its study involves an inquiry into what these results are in fact, altogether apart from what they should be according to our notions of the fitness of things.

There is a group of substances, of the methane series, which are known to chemists as alcohols. These include glycerine; most of them, however, are intoxicating and some, such as amyl alcohol, are highly dangerous to health. Of these, ethyl alcohol is the basis of all malted and distilled liquors and, along with such substances as ether, is one of the chief known intoxicants. In the Pharmacopoeia it is labeled as a poison, being a mild drug of addiction of less potency than cocaine, opium derivatives and crude opium, in the order named. The lethal

dose for a normal man is about a pint and a half of proof spirit. This harmfulness when taken in excess alcohol shares with common substances such as nicotine and table salt. Unlike these, however, alcohol is pleasant to most palates and the system has no automatic check upon excessive absorption. Although both acute and chronic alcoholic poisoning are by no means uncommon, the chief significance of alcohol is as a beverage, a food and a drug. The problem of alcoholism arises from the narcotic effect of a liquor which is pleasant as a beverage and which may have properties as a food.

The use of alcohol as a beverage is almost universal among the human race, the exceptions being a few primitive peoples such as the Andaman Islanders. The theory, however, of the late Dr. Archdall Reid that the craving for alcohol is an "instinct" has not been widely admitted. Nor have the attempts to explain alcoholism in terms of climate or of race been generally accepted. Climatic considerations will scarcely account for the heavy alcoholic consumption per capita of France, for the fact that Denmark consumed between three and four times as much liquor as Norway before the latter adopted prohibition, or for the great changes from decade to decade (apart from a climatic seasonal rate) in the amount consumed. The Committee of Fifty and others have shown that some races have heavy drinking habits and that the Jews have a universal reputation for sobriety, but immigration and change of conditions seem to modify these habits, and good authorities are of the opinion that Jewish temperance is due to cultural influences such as operate in the case of members of many religious denominations. Too much weight, then, must not be attributed to indications of climatic and racial variations.

The consumption of distilled spirits has increased rapidly since the seventeenth century. Drinking by industrial workers in connection with their employment has largely replaced the heavy but spasmodic convivial drinking of the Middle Ages. According to Shadwell (*Drink, Temperance and Legislation*, p. 24), the known consumption of distilled spirits in England has been:

YEAR	THOUSANDS OF GALS. (U.S.)
1684	633
1714	2,500
1727	4,322
1735	6,475
1751	13,200

From 1894-98 the annual per capita consumption of absolute alcohol in any form (Rowntree and Sherwell, p. 613) was:

United States	1.00 Gals. (U.S.)
United Kingdom	2.08 "
France	3.56 "

The annual per capita consumption separately for distilled spirits, wines and beer in United States gallons is given in the table below:

	YEAR	DISTILLED SPIRITS (PROOF GALS.)	WINE	BEER
United States	1875	1.50	.45	6.71
	1900-04	1.36	.47	16.94
	1905-09	1.43	.57	19.46
	1910-14	1.46	.60	20.38
United Kingdom	1871-80	1.42	.61	33.80
	1891-95	1.20	.45	35.70
	1900-04	1.25	.41	36.23
	1905-09	1.01	.32	32.90
Great Britain and Northern Ireland only	1910-13	.83	.31	32.62
	1923	.41	.37	19.96
	1926	.33	.50	21.53
	1900-04	.98	38.36	7.32
France	1905-09	.90	41.36	7.66
	1910-13	1.01	33.89	8.69
	1923	.71	44.38	8.03
	1926	.71	33.81	7.21

Source: The figures for the United States are adapted from the *Statistical Abstract of U. S. 1922*, p. 694. The English figures for the period until 1905 are adapted from the various issues of the *Statistical Abstract for the United Kingdom*. From 1905 on the figures given in the *Reports of Commissioners of Customs and Excises* were used; these apply to years beginning April 1. The data for France come from the *Annuaire statistique 1927*.

As indicated by the table, the consumption of alcohol in the United States was on the whole increasing before war time restrictions and prohibition went into force. In the United Kingdom there was for some years a trend toward reduced consumption, but this was slow until legislative restrictions were introduced after the war. Since convictions for drunkenness in Great Britain, however, have fallen more rapidly than the decrease in consumption, despite presumably increased police stringency, it would be improper to conclude that there is a direct relationship between consumption and the problem of public intoxication. At the same time the slow change in consumption between the middle of the last century and the first decade of this, in contrast with the rapid decline under post-war taxation, indicates the power of the legislature to control this problem far more rapidly than can be done by the slow change of manners. In 1834 the number of persons apprehended in London as

drunk and disorderly was 12.3 per 1000; in 1857 it was 6.9; in 1874 it was 6.5; in 1892 it was 5.2. In England and Wales in 1857-61 the number proceeded against for drunkenness was 428.5 per 100,000 of population; in 1874-78 it was 812.4; in 1899 it was 674.6. In 1905 the gross figures for convictions were 207,171; in 1913 they were 188,877, and in 1926 they were 67,126.

The physiological effects of the excessive consumption of alcohol are apparent in the mortality statistics. The deaths from alcoholism (using the word in the medical sense) in England and Wales were, in 1913, 2153 and, in 1924, 542, or, per 100,000 of estimated population, 5.8 and 1.4 respectively. In the United States (registration area), the figures are, for 1914, 3257 and, for 1924, 3153, or, per 100,000 of estimated population, 4.9 and 3.2 respectively (being in 1920, when prohibition was perhaps most effective, 1.0). Alcoholism is therefore a quite minor cause of death (much less than 1 percent of total deaths) and is chiefly significant as a probable index of excessive consumption. To these figures must probably be added those for cirrhosis of the liver. How far alcohol is a causative factor in this disease is by no means precisely known. Although many deaths are probably due to cirrhosis which are not due to alcohol, it is almost certainly the case that cirrhosis is primarily alcoholic and provides an index of the fluctuations of alcoholism. It thus corrects a certain unreliability, which is due to medical reluctance to certify death as being due to alcoholism, in the figures appearing under this heading. The number of deaths due to cirrhosis in England and Wales in 1913 was 3558 (1519 women) and, in 1924, 1609 (573 women), or, per 100,000 of estimated population, 9.6 and 4.2 respectively. The sex ratio will be noticed, women being by far the more sober sex. This fact is due presumably to cultural considerations and militates against any doctrine of inherited alcoholism, although heavy drinking among women is by no means recent (Shadwell). In the United States (registration area) there were, in 1914, 8526 deaths from cirrhosis and, in 1924, 7344, or, per 100,000 of estimated population, 13.0 and 7.4 respectively. This is also, then, a quite minor cause of death. Alcoholic degeneration of the heart, or "beer-drinker's heart," is probably another directly alcoholic disease, especially in heavy beer drinking countries such as Germany. Alcoholism is, however, a secondary cause of

death in many cases where the primary responsibility is not fastened upon it. According to the United States Census Bureau (1918) alcoholism is responsible as secondary cause in twice as many cases as when it is primary cause, and other careful calculations (Vernon) place the proportion at three times as many.

The morbidity statistics are unfortunately neither so easy of access nor so precise as the mortality figures. There is reason, however, to believe that the most serious effects of excessive drinking lie in a weakened resistance to disease rather than in actual alcoholic complaints. There is even more evidence for supposing that it has a deleterious influence upon the chances of recovery from illness. This is recognized as true in the case of syphilis and is also probably true (G. Sims Woodhead, Drolet) of tuberculosis. In the Bellevue and Allied Hospitals, New York, in 1912, 20 percent of the admittedly alcoholic cases, and 35 per cent of the non-alcoholic, had tuberculosis arrested or cured. In New York City in 1921 the death rate from nephritis and Bright's disease was heaviest among the Irish and Germans, traditionally heavy drinking groups.

Whatever is true of a normal drinking of alcohol, it is alleged that chronic alcoholism has an injurious effect upon subsequent generations. Early experiments (Ridge, Féré) showed the injurious effects of alcohol solutions on germinating animal life. The experiments of Stockard with guinea pigs confirmed these results and demonstrated that the number of survivors in the second generation was reduced and that of these an abnormal proportion was somehow defective. Excessive alcoholic doses, moreover, while encouraging the sexual and other impulsive activities, are liable to have a degenerative effect upon the sexual glands (Bertholet, Weichselbaum). These findings, along with the evidence of certain family studies (Dugdale, Mott), indicate that alcohol is a racial poison if taken in sufficient quantity. Stockard's further experiments, however, confirmed by others, especially MacDowell and Pearl, point to the conclusion, adumbrated by Pearson, that descendants of the normal specimens among those whose parents were alcoholized are physically superior to the descendants of the unalcoholized, presumably because of the elimination of less fit stocks. But this lethal and selective effect of alcohol can only operate when stronger and heavier doses of alcohol are taken than are probable in human consumption.

Perhaps more practically relevant to the problem of alcohol as a race poison is the probability that a pathological desire for alcohol or a remarkably low resistance to it is symptomatic of defective stock. Excessive drinking may cause defectiveness in the next generation (Kerr, Combemale, Mott), and a vicious biological circle seems to be set up, as a result of which this defectiveness itself is symptomized by alcoholic excess.

The psychological effects of alcoholism, as shown in insanity, seem to be entirely consistent with the above hypothesis. The work of Sullivan and Mott has tended to discredit the view that alcoholism is a cause of any extensive amount of certifiable insanity, but to confirm the opinion that inebriety is one of the ways in which inferior stock proclaims itself. But if we include the earlier stages of mental defectiveness, then, as Sullivan himself says, "alcoholism is a very important cause of insanity." Persons of this kind, whether neurotics because drunkards or drunkards because neurotics, will tend to endeavor to obtain drink whenever obtainable and of whatever quality obtainable. Hence imperfectly enforced prohibition seems to have a selective and adverse influence upon them. The observations of Pollock and Furbush show that in the civil state hospitals of New York in 1912, 565 new cases of alcoholic insanity were admitted (131 females); in 1920 there were 122 cases (32 females); in 1922 there were 225 cases (32 females).

A deep seated if not inherited tendency to drink alcohol for its peculiar properties can be found in many persons who are neither drunkards nor defectives. The theory of an alcoholic diathesis, or similar theories to the effect that the individual craves alcohol to supply a deficiency of euphoric substances in the blood or glandular system or to compensate a lack of "endocrine balance" (Campbell, Crichton Miller, Berman), cannot yet be taken as generally accepted. But even if there is not a physiological basis for the craving, it may well be suggested that the psychological craving has determinable causes. According to the Freudian school this is to be found in repressed homosexuality. While admitting the intimate connection between alcoholism and release from sexual (as well as other) repressions, it seems more consistent with experience to substitute for this dogma the explanation that alcoholism is a method of finding refuge from strain. Except among defectives, alcoholic excess is probably specifically

associated with a sense of inferiority, which is allayed by the heightening of the impulsive functions in distinction to the more Hamlet-like sensitive and critical functions. Hence it has perhaps a peculiar attraction for the more introspective races (McDougall); the Negro, even if he drinks convivially and dangerously, is seldom a chronic alcoholic (Committee of Fifty). If we examine the distinct types of drinking we discover that there are roughly four. First, "misery-drinking," for which a sense of inferiority or of being unequal to the demands of the external world is responsible, although wretched economic and social conditions may often provide only the predisposing cause and personal afflictions the stimulant cause (Pringle, Kelynack). "The quickest way out of Manchester is the gin-shop." This type of drinking goes with low wages, cheap spirits and a desire for complete intoxication. Second, "industrial drinking," due partly to undernourishment but chiefly to fatigue and heat, consistent with "soaking" rather than drunkenness, and due to a desire to drink something with sufficient "kick" in it to make one equal to the task in hand. Third, "occupational drinking," where success in a trade depends upon "treating" the would-be customer or the fellow worker. In so far as it is not genuinely convivial, of all forms of drinking this seems to be the most artificial and the most easily restricted by legislation such as the British "no-treating" order. In this and the previous case occupational statistics (Dublin, Lewinski-Corwin) are of great value in throwing light upon the problem. Fourth, "convivial drinking," where there is no particular desire to become unconscious. This type of drinking conduces rather to drunkenness than to chronic alcoholism. Thus the English mining countries head the list for convictions for drunkenness, but miners are low in the statistics of mortality from alcoholism. On the other hand, at the present time, of the five economic classes in the British mortality returns, the two richest classes have the worst record of deaths from alcoholism, being able to afford the liquor. In certain circles a sense of social superiority is given by having a well filled cellar and a taste in wines of good vintage. In convivial drinking, on the whole, one notes a desire to be equal to an occasion, to secure artificially a sense of vitality which one does not possess innately, and to rise above minor worries and anxiety. Alcohol is distinctly a fear dispeller and, as a

narcotic, results in boldness of decision. Hence its use in emergencies of public speaking or social events. As Kraepelin says, its drug uses may enable morbid inhibitions to be overcome when quick decisions are needed.

Excessive consumption, to which those who stand most in need of alcohol are most tempted, may have serious social consequences stretching beyond considerations of health. Here drunkenness must probably be sharply distinguished from chronic alcoholism. In its elaborate study a generation ago the Committee of Fifty found, among 13,402 convicts, that intemperance was directly responsible for the crime in 16.87 percent of the cases, a primary cause in 31.2 percent and a factor (including herein the intemperance of others, parents or associates) in 49.9 percent. There is undoubtedly an association of drunkenness with brawls (Corradini), and also with destruction of property, assaults upon women, and solicitation of women, unwilling and willing (although there is, on the other hand, at least as much evidence that the successful prostitute is abstemious as that she is a drunkard). But skilled crimes require a steady hand. Even of crimes of violence the English figures do not fluctuate with the figures of liquor consumption (Shadwell). The more recent survey of Sullivan leads him to the conclusion that simple drunkenness is "rarely a cause of serious crime," except in connection with the sexual instinct. On the other hand, of 220 attempted suicides he attributes 78 percent to alcoholism, four fifths of the cases supervening upon chronic alcoholism. Of 200 convicts guilty of homicide, Sullivan found the act in 60 percent of the cases to be due to alcoholism; in matters of a less serious nature, especially aggravated assaults, this was the cause in 82 percent of the cases. In both groups the alcoholism was to some degree chronic. There is little proof that alcoholism has any relation to drug addiction, save that both are neurotic symptoms; restriction from the one has not been shown to lead to an increase of the other, nor yet the one to conduce to the other. In brief, the peculiar mental condition of the chronic alcoholic leads to a rather small number of offenses but these of an exceedingly serious nature (Crothers, Sullivan). It is important to add that one of the consequences of alcoholism is jealousy and a tendency to assault those with whom one is sexually related, chronic alcoholism conducing also to offenses of a perverted nature. In this connection those best

competent to judge consider as a significant index of the secondary consequences attributable to alcoholism the fact that the number of divorces granted in certain states on the ground of drunkenness has declined in direct ratio with the decline in consumption of alcoholic liquors. For the period 1887-1906 the average of the percent of divorces due to alcoholism was 3.9; in 1922 the percent was 1.0 and in 1925 it was 1.4.

The worst effects of alcoholism fall probably upon the other members of the family who do not enjoy the alcoholic euphoria. The connection between intemperance and poverty and dependence has always been recognized. For many reasons the statistics are not of a strictly scientific nature. The Committee of Fifty attributed 25 percent of the cases for relief which came within the purview of the charity organization societies to the use of alcoholic liquor, 18 percent being due to its personal use. Of cases in almshouses and workhouses 37 percent owed their dependency to intemperance and 32 percent to personal use (12.7 percent of women owing their position to the habits of others as against 6 percent of men). Of the destitution of children 45 percent was attributed to the drinking habits of others. Comparison of city with city and the previous investigation of the Massachusetts Bureau of Labor confirm these figures. Charles Booth, in his survey of East London, attributed pauperism to intemperance in 14 percent of cases, but declared it to be "the most prolific of all causes" (and the least necessary) because without it the major causes—sickness and old age—could be better met. In 1916 intemperance (with a careful definition) was found to be a cause of poverty in 18 percent of cases by the Philadelphia Charity Organization Society; the New York Charity Organization Society placed the figure at 20 percent, the Hartford, Connecticut, agency at 24 percent, and the Portland, Maine, agency, as a major cause, at 30 percent (*The Prohibition Situation*, p. 18-19). If drink is a cause of poverty, the question remains how far bad economic conditions are in turn a cause of "misery drinking" and "industrial drinking."

In the case of juvenile delinquency, although the juvenile usually becomes a delinquent before he has had time to become a heavy drinker, most social workers assert as an important factor in this delinquency the effect of intemperance in the home, although here again we may be confronted with the problem of neurotic stock. It has been demonstrated

by numerous physiological and industrial experiments that alcohol is not a thing to work on; the extent, however, of the decrease in industrial efficiency must depend upon such considerations as the time when the liquor is consumed, and the nature of the work, such as heavy routine work, on the one hand, or automobile driving, on the other. Investigations by Vernon have tended to show that the percentage of industrial accidents among munition workers was at its maximum when the chance of the recent consumption of an alcoholic beverage was at maximum. The statistics for certain British cities show a maximum of general accidents in the hours immediately following closing time on Saturday nights. The most satisfactory test, however, of the effect of drinking upon economic efficiency lies in the considered opinions of those most closely in touch with industrial conditions—the employers and workmen. In reply to a carefully worded and non-tendential questionnaire sent out by Herman Feldman, out of 175 firms replying on the subject of the individual productivity of the worker 101 stated that there was an increase due to prohibition, 3 affirmed that there was a decrease; of 223 firms answering on industrial accidents 74 claimed a reduction due to prohibition, none an increase; of 287 answering on attendance on Monday and the day after pay-day 184 notified an improvement attributed to prohibition and only 9 stated that the situation had become worse. It is affirmed by representative union officials that restriction of consumption increases the clear-headedness and disposition for initiative of the worker, and offers an escape from the vicious circle of the social consequences of alcoholism (in the sense not of intoxication but of bondage to an incapacitating habit). The shutting of the saloon, however, has left unsolved the problem of where the workers' impulse for sociability may be satisfied. The movies, which have benefited by the closing of the saloon (Feldman), have also been perhaps one of the major factors making for sobriety, since these theaters almost certainly offer a far better substitute for the saloon than the museums or libraries commended by Rowntree and Sherwell.

In summary it may be said that the problem of alcoholism is primarily the problem of a narcotic, and hence a psychological problem to which depressing environmental conditions predispose, as well as conditions of strain or conditions, physiological or social, which leave

the individual with a sense of inadequacy or deficient vitality. It may be urged that alcohol is especially deleterious in two types of cases: the economically depressed, for whom there is an external predisposing cause; and the neuropathic. The difficulty with the first could be mitigated by ownership of drinking places by the state or by public trusts, designed to remove the more obvious abuses, to encourage the drinking of alcohol only dilute and on a full stomach, not continuously, and to prevent the undue pushing of sales. It can be met more effectively (*cf.* the English figures of drunkenness convictions, *supra*) by heavy taxation, provided there be no objection to what is in effect class legislation; or by prohibition, where this is effective for both rich and poor so far as the availability of drinkable liquor is concerned. The second difficulty can in part be met by a satisfactory organization of inebriate homes and by an effective system of personal license, or by similar temperance legislation. It may be urged that alcohol is beneficial in certain emergency cases; for persons of a physiological or psychological defect of constitution (potential heavy drinkers though these be); and in the interests of conviviality. In most instances the right of medical prescription and the availability of light wines and beers could meet these difficulties. It must be remembered, however, that the effective enforcement of "light wines and beer" legislation, with a human nature which is easily incited to demand something with a "kick" in it, presents almost as many difficulties as prohibition. At least it may be said that, whatever may be the future trend of legislation, its effectiveness and permanence will depend upon its taking into consideration the local social conditions and scientific considerations of human physiology and psychology.

GEORGE E. G. CATLIN

REGULATION. *See* LIQUOR TRAFFIC.

See: LIQUOR INDUSTRY; LIQUOR TRAFFIC; TEMPERANCE MOVEMENTS; PROHIBITION; ANTI-SALOON LEAGUE; WOMEN'S CHRISTIAN TEMPERANCE UNION; DRUG ADDICTION.

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ALCOTT, AMOS BRONSON (1799-1888), educator and author. He was the son of a farmer and mechanic and had no formal education. In 1814 he began to earn his living in a clock factory at Plymouth, Connecticut, and afterwards traveled for many years as a peddler, chiefly in the South. He began to teach in 1823 and conducted schools at Bristol and Cheshire, Connecticut, and at Germantown and Philadelphia in Pennsylvania. In 1834 he opened the famous school in Boston where he developed his original methods of self-instruction with the purpose of stimulating the personalities of the children. He was obliged, as a result of financial failure, to abandon this enterprise in 1839, although he had originated methods that were to be adopted by subsequent generations and that are admirably described in Miss Elizabeth P. Peabody's *Record of Mr. Alcott's School* (Boston 1835). He had been one of the founders of, and chief contributors to, *The Dial* and was intimately associated with the group of transcendentalists, whose ideas he spent his life disseminating. In 1840 he settled in Concord, Massachusetts, as the friend and neighbor of Emerson and Thoreau. After visiting England in 1842 he founded the communistic enterprise of "Fruitlands" at Harvard, Massachusetts,

an attempt to combine farming and spiritual development under ideal conditions. The experiment, however, resulted in almost immediate failure. He lived for the rest of his life in Concord, and traveled throughout the country, conducting the "Conversations" for which he became famous—informal talks on a wide range of practical and spiritual topics, emphasizing the ideas of the transcendentalists.

As a thinker he was an imitator and paler counterpart of Emerson, but his philosophy never crystallized into any concrete form. His old age was brightened by the fame and financial success of his daughter Louisa, and he became in 1879 the nominal head of the Concord School of Philosophy. He was an active abolitionist.

VAN WYCK BROOKS

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ALCUIN (735-804), theologian and educator. He was trained at the cathedral school at York, then famous for its teachers and its library. In 780 the superintendence of the York library and school was entrusted to him. Two years later he was persuaded by Charlemagne to go to Aix-la-Chapelle and take over the direction of the palace school. Save for two brief visits to England, Alcuin remained in the Frankish kingdom until his death. In 796 he was presented with the great monastery of St. Martin at Tours, where he passed the last eight years of his life.

His numerous writings, consisting of letters, commentaries on the Bible, theological tractates, educational treatises and a considerable body of poetry, show that Alcuin had read extensively, but do not display great originality of thought. He defended the orthodox view against the adoptionist heresy preached by the bishops of Toledo (Elipandus) and Urgel (Felix). In the question concerning the relations between the temporal power and the church, Alcuin's views seem from his correspondence to coincide with those of Jonas of Orléans and of the pseudo-Isidorian Decretals, namely that the church may claim authority over all its members, including

those in whom the chief temporal power is vested.

Alcuin's chief fame rests on his work as a teacher and as Charlemagne's informal minister of education. He made the palace school and later the school at Tours the foremost in the kingdom. He inspired many of Charlemagne's decrees, which contributed much toward the establishment of an educational system and the creation of an educated clergy. Finally, according to an undisproved tradition, he supervised the much needed revision of the Vulgate.

M. L. W. LAISTNER

Works: His complete works are to be found in Migne, J., *Patrologia latina*, vols. c-ci; there is a modern, critical edition of the letters in *Monumenta Germaniae Historica: Epistolarum*, vols. i-vi (Berlin 1891-) vol. iv, and of the poems in *Monumenta Germaniae Historica: Poetarum latini aevi carolini*, vols. i-vi (Berlin 1880-) vol. i, p. 160-351.

Consult: Werner, K., *Alcuin und sein Jahrhundert* (Paderborn 1876); Gaskoin, C. J. B., *Alcuin: His Life and His Work* (London 1904); West, A. F., *Alcuin and the Rise of the Christian Schools* (New York 1892).

ALDRICH, NELSON WILMARTH (1841-1915), American party leader, known chiefly as a staunch defender of the Republican policy of protectionism and as an advocate of banking reforms. He was senator from Rhode Island from 1881 to 1911, and his own extensive investments in banking, sugar, rubber, traction, gas and electricity made him in popular fancy the representative par excellence of the big business point of view in Congress. The rotten borough system in Rhode Island enabled him to disregard the popular currents of the day without concern for his own reelection.

From 1897 until 1905 he was the leader of the inner ring which virtually dominated the affairs of the Senate. His genius as a parliamentarian and his skill in handling men extended his influence over a much longer period. He was an important factor in the framing of the following measures: the tariff acts of 1890, 1894, 1897 and 1909, the Gold Standard Act of 1900, and the Aldrich-Vreeland Currency Act of 1908.

His chief constructive contribution is in the field of banking and currency reform. As head of the National Monetary Commission, created in 1908, he made a thorough study of the leading banking systems in the world. In 1911 this commission urged the adoption of a system of emergency currency based upon the redis-

counting of commercial paper and the creation of a national reserve association with fifteen regional branches. Although Aldrich was not a member of the Senate at the time of the passage of the Federal Reserve Act, his influence on the measure is unmistakable. His plan differed from the one adopted in that it left final control with the bankers rather than with the government.

HAROLD F. GOSNELL

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ALDRICH PLAN. See FEDERAL RESERVE SYSTEM.

ALEATORY CONTRACTS. See CONTRACTS.

ALEMBERT, JEAN LEROND D' (1717-83), French mathematician, philosopher and man of letters. He was editor, with Diderot, of the *Encyclopédie* (1751-80), at least for the first seven volumes (1751-57). He wrote for it the *Discours préliminaire* (republished separately, Paris 1894), where he set forth, along with a general classification of human knowledge, a theory of the formation of ideas, and views on the historical progress of the sciences, as well as on the psychological and social factors in their origin and development. A disciple of Locke and of Condillac, his general attitude is empirical, sensationalist and, with regard to metaphysical problems, skeptical.

His classification of knowledge is derived from Bacon, and based upon the distinction between the three essential mental faculties: memory (history), reason (philosophy), imagination (the fine arts). But this order, which with Bacon is purely static, becomes with d'Alembert psychogenetic and even historical: it represents the normal development of the mental processes in an individual man; it epitomizes the real progress of knowledge during the early history of humanity. This order occurs again and again in history, with one important reservation—the period beginning with the Renaissance. The imaginative arts, born of imitation of the ancients, this time preceded the rational sciences. Learning, art and literature, natural philosophy, has been the order of modern progress.

Finally the sciences owe their origin to human needs and their development principally to life in society, for "the ideas which are

acquired by reading and by association with others are the germ of nearly all discoveries." These two ideas of a historical order and of the preponderance of social factors in intellectual evolution were taken up again by A. Comte, who rightly saw in d'Alembert one of the precursors of positivistic sociology.

RENÉ HUBERT

Works: *Oeuvres*, 5 vols. (Paris 1821-22).

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ALEXANDER I (1777-1825), emperor of Russia. As a youth he was inculcated with liberal ideas by his Swiss tutor Laharpe, and later he had to manoeuvre skilfully between his grandmother Catherine II and his father Pavel I, who were always at loggerheads. This stimulated the development of a temperamental secretiveness, a double personality and a variety of histrionism which remained with Alexander through life. Depressed by the despotism of his father's reign, Alexander hoped in the future to liberalize the government of Russia and to make possible the abolition of serfdom. Immediately upon his enthronement (1801) he created a committee of personal friends to prepare the reforms. The work of the committee yielded little of value because it set itself an impossible task of combining freedom within the law with unlimited absolutism. The machinery of administration was technically improved, rules were promulgated for the liberation of serfs with their lords' consent, but that was all. Defeats suffered in the ensuing wars with France forced Alexander to form an alliance (Tilsit treaty) with Napoleon, which aroused serious opposition in Russia. To allay the unrest Alexander resumed the preparation of reform acts. Speransky drew up a project of a constitutional monarchy, according to which the legislative power was to be shared by the monarch with a representative assembly. Speransky fell from grace through court intrigues by conservatives and his project was not brought to life because of the War of 1812.

The events of this war left a deep impress on Alexander. He became subject to mystic moods, and drafted the plan of the Holy Alliance for the promotion throughout the world of state policies based on the Gospels. During the Vienna Congress and in the following years Alexander was dominated by ideas of legitimism and of restoration of pre-revolutionary regimes

as an antidote to the revolutionary movements in Europe. In domestic affairs he also renounced the liberalism of his earlier years. Alexander completely approved of the regime of unenlightened absolutism, introduced by his closest confidant, Arakcheyev. This led to a recrudescence of revolutionary sentiments among the young officers imbued with western radical ideas, and to the organization of a net of revolutionary secret societies among them. Although the plot became known to Alexander, he was slow to take action. His growing vacillation was also apparent in the foreign policy of the last years of his reign. When the Greeks rebelled against the Turkish authorities, the Holy Alliance headed by Alexander had to support either legitimism against revolution, as it had consistently done heretofore, or Christians against Moslems, in accordance with Russian policy in the Balkans. Alexander hesitated for some time, but was spared the necessity of a decision by his sudden death.

A. KIESEWETTER

Consult: Shildef, N. K., *Imperator Aleksandr Perviy, ego zhizn i tsarstvovanie* (Emperor Alexander I, His Life and Reign), 4 vols. (2nd ed. St. Petersburg 1904-05); Nikolay Mikhaylovich, Grand Duke, *Imperator Aleksandr I*, 2 vols. (St. Petersburg 1912); Schiemann, Theodor, *Geschichte Russlands unter Kaiser Nikolaus I*, 4 vols. (Berlin 1904-19) vol. i; Pypin, A. N., *Obshchestvennoe dvizhenie v Rossii pri Aleksandre I* (4th ed. St. Petersburg 1908), tr. by B. Minzes as *Die russische Gesellschaft unter Alexander I* (Berlin 1894); Melgunov, S. P., *Dela i lyudi Aleksandrovskogo vremeni* (The Affairs and People of the Time of Alexander) (Berlin 1923); Kornilov, A. A., *Kurs istorii Rossii XIX veka* (Moscow 1912-14), tr. by A. S. Kaun as *Modern Russian History* (New York 1924) chs. iv-xiii.

ALEXANDER II (1818-81), emperor of Russia from 1855. The reign of Alexander began during the Crimean War, which brought out the inefficiency of the regime of absolutism and made comprehensive reforms inevitable. Although not in sympathy with constitutional ideas Alexander understood the seriousness of the situation. "Better that reform should come from above than wait until it is imposed from below." The reforms began with the abolition of serfdom (1861); the peasants were granted personal freedom and some land, and the government provided assistance to peasant communities in paying compensation to the former landowners. Other progressive measures included the introduction of local self-government (*zemstvos* and municipalities), of a new court system and of universal military service.

As a whole these reforms removed the most serious obstacles to free economic and social development of Russia, and the country began to progress rapidly along the lines of economy and industrialization. Public opinion expected that the reforms would culminate in the creation of a parliament, but these expectations failed to materialize. A conflict between the government and the liberal groups appeared therefore inevitable and revolutionary activities spread rapidly. The government tried to suppress the movement by police measures which merely made the conflict more acute. Only at the end of his reign did Alexander agree to summon *zemstvo* deputies to some committees of the Imperial Council, but before this measure could be promulgated he was assassinated by the revolutionists.

As regards the non-Russian parts of the empire and especially Finland and Poland, Alexander pursued a conciliatory policy. The Polish extremists, however, drifted toward a radical solution of the Polish problem, so that after the unsuccessful insurrection of 1863 the remnants of Polish autonomy were abolished. Simultaneously a far reaching land reform was carried out in Poland favoring the peasants against the nobility who then constituted the mainstay of Polish nationalism.

Alexander II pursued an aggressive policy in the Middle East (as exemplified by the conquest of Turkestan) and in the Near East. In 1870 Russia reassumed the right, lost after the Crimean War, of maintaining a fleet in the Black Sea. The Russo-Turkish War of 1877-78 resulted in the liberation of Bulgaria and the acquisition of Kars and Batum in Transcaucasia.

G. VERNADSKY

Consult: Tatishchev, S. S., *Imperator Alexander II* (in Russian), 2 vols. (2nd ed. St. Petersburg 1911); Cardonne, C. de, *L'Empereur Alexandre II* (Paris 1883); Rambaud, Alfred, *Histoire de la Russie* (7th ed. Paris 1918) p. 671-755; Kornilov, A. A., *Kurs istorii Rossii XIX veka* (Moscow 1912-14), tr. by A. S. Kaun as *Modern Russian History* (New York 1924) pt. ii, p. 1-248; Vernadsky, G., *A History of Russia* (New Haven 1929) p. 151-66, 191-98.

ALEXANDER THE GREAT (356-323 B.C.), Hellenic conqueror and statesman. Alexander's inheritance included his ancestral kingdom Macedon, the headship of the Hellenic League founded by his father Philip II, and a mandate to wage a war of revenge, liberation and spoliation against the Persians. The first phase of this war (334-331 B.C.) left him in possession

of all the lands around the Eastern Mediterranean included up to that time in Greek aspirations. Not content with this he succeeded in hurling the Persian king (Darius III) from his imperial throne and in asserting his authority over all the Iranian peoples and the entire basin of the Indus.

On the death of Darius Alexander assumed the kingship of the Persians, and despite Macedonian opposition he drew freely for his administrative and military services on the former Aryan lords of Asia. He carried this policy of fusing the imperial races so far as himself to choose his queen from among the conquered, and to require eighty of his officers to marry Iranian ladies and ten thousand of his soldiers to take native wives. This astounding policy was a recognition of the fact that Macedonians and Greeks alone were too few to dominate the vast alien population involved in the second phase of his war of conquest (331-324 B.C.). It encountered too many national prejudices to have any chance of success after Alexander's premature death (323 B.C.); but through emphasizing the common humanity that underlay differences of race, language, religion and culture it reenforced other cosmopolitan tendencies of the time (the Greek *koiné*, individualistic philosophies and religions, etc.), and entered into the imaginative heritage of Zeno, the founder of the stoic school of philosophy.

The conquests of Alexander prepared the way for larger world unity by breaking down existent states. They permitted the expansion of the Greeks into the East, and this expansion, being one of city-states both because it was the instinct of the Greeks to expand that way and because Alexander conceived city-states as essential for civilizing the fused world of his vision, became a further element of political disintegration. The monarchy of Alexander, although theoretically triune in character—to the Macedonians he was a national king, to the Greek city-states a god-king, to the Asiatics a king by divine grace—was actually one all embracing autocracy. By divorcing government from self-government it facilitated the task for Rome. By uniting Europe and Asia in one denationalized political world the conquests of Alexander favored the rise and spread of the religious ideas which ultimately found expression in Christianity. Such was the compelling quality of the great Macedonian's work and personality that the Alexander of legend

achieved triumphs undreamed of by the Alexander of history.

WILLIAM SCOTT FERGUSON

Consult: Arrian, *Anabasis*, tr. by E. J. Chinnock (London 1884); Wheeler, B. I., *Alexander the Great* (New York 1900); Tarn, W. W., in *Cambridge Ancient History*, vols. i-vii (Cambridge, Eng. 1923-) vol. vi (1927) p. 352-504; Magoun, F. P., *The Gestis of King Alexander of Macedon* (Cambridge, Mass. 1929).

ALFIERI, VITTORIO, CONTE (1749-1803), Italian tragic poet, dramatist and political writer. He was born in Piedmont of an old and illustrious family. In his famous autobiography (*Vita . . . scritta da esso*, tr. by C. E. Lester, 2nd ed. New York 1845; in *Opere*, vol. i) he tells of the superficial education he received at the Academy of Turin, of his lack of interest in study during his youth, and his astonishing indifference to the Italian language and traditions. He spent about six years in the principal countries of Europe, and it was in this period that he first read Dante, Petrarch, Boccaccio, Machiavelli and Tasso. It was not until his twenty-sixth year, disgusted with a life of self-indulgence, ashamed of his ignorance and fired with ambition, that he determined to become an author. At first he wrote in French, but he soon made up his mind to "unfrenchify" himself, and he went to Florence to begin the serious study of the Italian language and literature. Within fourteen years, from 1775—the date of his literary "conversion"—to 1789, he published nineteen tragedies and wrote much verse as well as some noteworthy prose works on political subjects. Between 1786 and 1792 he spent most of his time in Paris and had an opportunity to observe the development of the French Revolution. At first he was favorably disposed toward it, praising in an ode the storming of the Bastille, *Parigi sbastigliato* (in his *Opere*, vol. iii, p. 132-39), but he later regarded the excesses of the revolution as a corruption of true liberal principles. He fled from Paris in 1792 and gave expression to his hatred of the French people and of the revolution in his *Misogallo* (The Anti-Gallican—*Opere*, vol. iv).

Alfieri denounced all forms of arbitrary power and emphasized the necessity of liberty, of government animated by ideals of freedom and regulated by law (consult his tragedies and some of his principal prose works—*Della tirannide*, *Del principe e delle lettere*, *Panegirico di Plinio a Traiano*—in *Opere*, vol. x). His *Bruto primo* (in *Opere*, vol. vi, p. 299-340) is dedicated

to "General Washington, the liberator of America." He wrote a long ode, *L'America libera* (in *Opere*, vol. iii, p. 36-53), exalting the American revolutionary movement. In a chapter of his *Del principe e delle lettere* (in *Opere*, vol. x) entitled "Esortazione a liberar l'Italia dai barbari," Alfieri emphasized among other things the use of literature as a means of achieving Italian unity and sensed the extinction of the temporal power of the popes. His *Bruto secondo* (in *Opere*, vol. vi, p. 385-428) is dedicated to the "future Italian People." In his *Misogallo* he envisaged the unity of Italy and spoke of hatred of the French as the fundamental basis of Italy's political existence. This book is important as an expression of a need for the political, intellectual and moral autonomy of Italy. Alfieri may be considered the father of modern Italian patriotic literature and is renowned for his part in arousing the Italian people to a sense of national consciousness.

GAUDENCE MEGARO

Works: *Opere di Vittorio Alfieri ristampate nel primo centenario della sua morte*, 11 vols. (Turin 1903).

Consult: Bustico, G., *Bibliografia di Vittorio Alfieri* (3rd ed. Florence 1927); Bertana, E., *Vittorio Alfieri studiato nella vita, nel pensiero e nell'arte* (2nd ed. Turin 1904); Scandura, S., *Il pensiero politico di Vittorio Alfieri e le sue fonti* (Catania 1919); Gobetti, G., *La filosofia politica di Vittorio Alfieri* (Turin 1922); Calosso, U., *L'Anarchia di Vittorio Alfieri* (Bari 1924); Gentile, G., *L'Eredità di Vittorio Alfieri* (Venice 1926); Ruggiero, G. de, *Storia del liberatismo europeo* (Bari 1925), tr. by R. G. Collingwood (London 1927) p. 281-84.

ALFONSO X (1226-84), king of Castile, royal scholar and lawgiver, succeeded his father Fernando III in 1252. His thirty years' reign was marked by continued strife with the Moors, fruitless efforts to attain the throne of the Holy Roman (German) Empire, and domestic insurrections resulting finally in his overthrow by his own son Sancho. The title of *el sabio* (the learned), which distinguishes him from all other Spanish monarchs, marks his fame as a man of learning according to the notions of his time. He was fond of astrology (e.g. his lengthy dissertation in the *Partidas* on the significance of the number seven); a work (*Libro del Tesoro*) on alchemy, which had long been cultivated in Moslem Spain, is doubtfully attributed to him; he translated Arabic works, wrote poetry and patronized learning. Yet his achievements as a lawgiver, for which posterity honors him, were then so little appreciated that he made no

attempt to give the greatest of them more than academic force.

Fernando III had planned a comprehensive scheme of codification to relieve the confusion and diversity of Spanish law; and almost immediately upon his accession Alfonso took up this project. After causing the preparation of several preliminary works he produced, about 1260, the celebrated compilation known as *Las siete partidas* (The Seven Parts), which was not promulgated until the reign of his great-grandson in the Cortes of Alcalá (1348). He probably took a direct part in its preparation and thus the influence of his learning was here most permanent. The work is preponderantly a reproduction of Justinian law, the first to appear in a western vernacular. It marks the reception of Roman law in Spain (displacing the native *fueros*) and its extension to her vast colonial empire overseas. It provided a basis for practical legal accord throughout the Spanish speaking world, including Spanish America and the Philippines, long after severance of the political tie.

CHARLES SUMNER LOBINGIER

Consult: Altamira, R., "Legal Sources in Castile" in *A General Survey of Events, Sources, Persons and Movements*, by various European authors, Continental Legal History Series, vol. i (Boston 1912) p. 607-10; Antequera, J. M., *Historia de la legislación española* (3rd ed. Madrid 1890).

ALGECIRAS CONFERENCE. *See* MOROCCO QUESTION.

ALIEN. The attitude toward the alien in modern as well as primitive society represents the crossing point of two contradictory lines of behavior, best mirrored, perhaps, in the etymology of the Latin *hostis* and *hospes*. These types of behavior are indicated, on the one hand, by the self-consciousness of an exclusive group which involves distrust, fear and hatred of strangers and, on the other, by the feeling of mankind, conscious or subconscious, which calls for the honoring and protection of visitors or those without help or kindred. Accordingly the position of the alien throughout social and economic history has been two sided, and has varied with the various currents of racial and national migration. Even open societies, like that of the United States, may close their gates more or less; and a society will always make some distinction between what it regards as "desirable" or "undesirable" aliens.

The civilization of classical times seems to have been the first to rationalize the group con-

sciousness of a large aggregate of territorial units into a superior cultural value, thus making the alien a "barbarian." The extension of Greek culture, and later of Roman citizenship, operated to break down this general exclusiveness and, until the beginnings of European nationalities at the close of the Middle Ages, the natural unit of cohesion against aliens was local, as in primitive times. This consisted either of the tribe (which in most cases meant equally the religious community) or of local settlements deriving from agricultural communities, either intensified into town life or extended into territorial government.

The concept of the alien varies in content and extent with these changing units. In the village community it designated even the landholder of a neighboring village, and he was permitted to hold local property only with the limited rights of an outsider (*Ausmärker* of German folklaw). In the mediaeval town it extended to foreign traders, who were subjected to a stringent guest law. In fact the creation of territorial government, from the jurisdiction of the Carolingian Empire down to the absolute monarchies of early modern times, shows a ceaseless struggle between the principle of *indigenatus* put forward by territorial estates and aristocracies as a claim to self-government, and the principle of an alien magistrature and bureaucracy used by the central authority to unify and standardize the administration of wider areas, whether national or supranational.

Not only political groupings but also racial contrasts sharpen the outlines of the concept of alien, as can be seen in the great commercial races such as the modern Greeks and Armenians and, even more, the Syrians and Jews. The part played by the Jews in the shaping of modern capitalism is well known. It is, however, to be borne in mind that the Jews represent only a marked instance of a well known and universal process in precapitalist society. The infiltration of aliens as commercial and banking entrepreneurs is exemplified in European history by the domination of the German Hanse and the mediaeval Italian and southern French traders, and also by the colonizing activities of the western nations in Asia, Africa and America.

According to the principle of exclusive settlement there is a tendency toward a segregation of these "guests" in special dwelling places. The Jewish ghetto in mediaeval and early modern towns stands as the most marked example of apparently hostile seclusion. Here

it must be remembered that separate alien settlements do not necessarily imply feelings of group hatred or contempt, but simply constitute a means by which two or more communities may associate without giving up their particular customs and traditions. Thus we find Germanic and Slav settlements living independently side by side all over the region of Germanic colonization in eastern Europe, and the splitting up of the modern oriental town or American city into the quarters of different races, nationalities and religions.

Not only in his economic position is the alien distinctive in his foreign surroundings. He is living in a new and strange environment or, if he is part of an alien group, he shares with the group the sense of a barrier between him and the race or nation which is in the position of host. Usually, therefore, he is characterized by a high degree of mobility and freedom from convention. Sometimes this has a positive value, as in the case of the Calvinist refugees from France, England and the Netherlands, who did so much to spread economic and social individualism in the static society based on the traditional ethics of the mediaeval Catholic church. Sometimes it is merely the plasticity and adaptability of a lower cultural stage, such as that of the Savoyard peddler in Europe, the Indian trader in Africa or the immigrant southerner and easterner in America.

Current interpretations of alien psychology have not taken into sufficient consideration the great change that has slowly taken place in the average type of world migrations. From the age of the prehistoric and protohistoric conquests of agricultural by nomadic tribes down to the nineteenth century, the dispersion of man over a larger territory was preeminently the result of superior physical or mental ability. The end of the nineteenth and beginning of the twentieth centuries are marked, on the other hand, by the overflowing of the weak and unprivileged, not only of capitalist and feudal Europe but also of the middle and far eastern empires. This change implies an alteration of methods in the aliens' struggle for existence. Instead of making their way by capacities for direct economic and political organization and leadership, they undercut the labor market and assume the role of critics of the social order which oppresses them. The mobility and unconventionality of the alien have always tended to make him an "objective" and rational judge of conditions that for him lack the character of the "natural,"

and have even made him attach himself to dissenting parties inside the society of his hosts. These qualities are now developing into at least a potential element of social and political unrest. The role of the revolutionary or Bolshevik alien in modern world politics is familiar. Its importance should not, however, be exaggerated. Socialism and anarchism are to a large extent the result of an internal process, a necessary outgrowth of the unhealthy sides of modern capitalist civilization, just as capitalism itself, although on occasion drawing heavily upon alien forces, Jewish or Protestant or imperialist, is essentially an internal process.

The juridical concept of the alien in international law could not but follow the general lines of these changing relations between higher and lower levels of economic and political organization. The old teaching of the founders of modern international law, strongly emphasizing the right of free access and asylum for the alien, closely corresponded to the interest of civilized governments in attracting valuable cultural and economic elements from abroad. Thus the alien law of nations like England, America and Switzerland was an indispensable component of their general policy of self-preservation and competition in the modern political and economic world. But characteristically the turn of the tide, first indicated by the British Aliens Act of 1905, was most clearly expressed in these same countries. Even if the treatment of enemy aliens and their property in the World War and the peace treaties be considered as a transient phase of international legal history, the present state of the problem, in opposition to the abstract rules of the "law of nature," is based on two positive principles. The first is the balancing of aliens' rights and aliens' duties, discriminating against them in the granting of full citizenship; the second is a reciprocity between nations in the treatment of their respective citizens.

CARL BRINKMANN

See: ASSIMILATION, SOCIAL; SEGREGATION; GHETTO; INTOLERANCE; ANTISEMITISM; ANTIRADICALISM; MOBILITY, SOCIAL; MIGRATION; IMMIGRATION; NATURALIZATION; CITIZENSHIP; ALLEGIANCE; ALIEN PROPERTY; ENEMY ALIEN; DIPLOMATIC PROTECTION.

Consult: Park, R. E., and Burgess, E. W., *Introduction to the Science of Sociology* (2nd ed. Chicago 1924) abstracts from W. Sombart and G. Simmel, p. 317-27; Michels, R., "Materialien zu einer Soziologie des Fremden" in *Jahrbuch für Soziologie*, vol. i (1925) 296-317; Brinkmann, C., *Wirtschafts- und Sozialgeschichte* (Munich 1927) p. 72-73.

FOR INTERNATIONAL LAW: Fauchille, P., *Traité de*

droit international public (8th ed. of Bonfils' *Manuel*) 2 vols. (Paris 1921-26) vol. i, pt. i, p. 888-986; Liszt F., *Völkerrecht*, ed. by Max Fleischmann (12th ed. Berlin 1925) p. 170-83; Hyde, C. C., *International Law*, 2 vols. (Boston 1922) vol. i, p. 94-106; Borchard, E. M., *The Diplomatic Protection of Citizens Abroad* (New York 1916).

ALIEN AND SEDITION ACTS. The Alien and Sedition laws were passed in 1798 by an overconfident Federalist party. The country was expecting war with France, and the x. y. z. incident had raised antiforeign hatred to the boiling point. The French government was believed to be spreading propaganda through paid agents, and the Republican press, edited largely by foreigners, was hurling virulent and scurrilous denunciation against the government and its officials. To meet this apparent crisis four laws were passed. The Naturalization Act (1 U. S. Statutes at Large 566) increased the period of residence necessary for naturalization from five to fourteen years. The Enemy Alien Act (1 U. S. Statutes at Large 577) authorized the president in his discretion to arrest, imprison or banish enemy aliens. The Alien Act (1 U. S. Statutes at Large 570) gave the president power to expel from the country any alien whom he regarded as dangerous to public peace or safety, or whom he believed to be plotting against the government. The last two acts were to expire in two years. The Sedition Act (1 U. S. Statutes at Large 596) forbade, first, seditious conspiracies or incitements, and second, the publication of any false, scandalous or malicious writing against the government of the United States, the president or Congress with intent to defame or bring them into disrepute, or to stir up hatred against them or to incite sedition, or to aid any hostile designs of any foreign nation against the United States. The maximum penalty for such publication was two thousand dollars fine and two years imprisonment. One accused under the act was allowed to prove the truth of writings alleged to be seditious; and the jury was made the judge of criminality. The act was to expire by limitation March 3, 1801.

The indignation and alarm of the Republicans was great, and justly so. The first prosecution under the Sedition Act was against a Republican member of Congress running for reelection, and all subsequent victims were Republicans. The cases were tried before unsympathetic Federalist judges and juries. While no aliens were deported, about twenty-five persons were

arrested for seditious libel; at least fifteen of them were indicted and ten convicted. Many years later (1840 and 1850) Congress repaid the fines imposed upon the most conspicuous victims. Jefferson and Madison made the laws the basis of attack in the famous Kentucky and Virginia Resolutions (1799), which declared the acts invalid and asserted the right of the states to nullify unconstitutional acts of Congress. The harsh enforcement of the laws cut deep into the public consciousness, and they were an important factor in the Federalist defeat in 1800 and in the final ruin of the party. Nor was the lesson soon forgotten. The War of 1812 was fought without restrictions upon freedom of expression; and during the Civil War, in spite of the most virulent newspaper attacks upon the government, no sedition law was enacted, although certain executive and military restrictions were sporadically enforced.

The constitutionality of the Sedition Act was sustained in the lower federal courts and by three Supreme Court justices sitting on circuit; but the question never came to the Supreme Court. The Alien Act was alleged to be void because it denied jury trial to deported aliens, and because it gave the president judicial powers. At the present time there can be no doubt as to its validity. The Sedition Act was based on the hypothesis, later declared unsound, that there is a federal common law of seditious libel which the statute clarified and in some respects softened. The Republicans attacked the act as an exercise of a power not delegated to Congress, and as a violation of the freedom of press and speech protected by the First Amendment. The weight of opinion is that as a peace-time measure it was void on this last ground. Certainly it went to the very limits of constitutionality.

The whole episode of the Alien and Sedition Acts burned itself indelibly into the American mind and tradition. It became accepted doctrine that freedom of speech and of the press is beyond the reach of any congressional peace-time regulation, and that it includes the right of full and free political criticism. Nor was the sharp punishment meted out to the party which enacted these unpopular laws likely to be forgotten by responsible party leaders. It was not until the World War that Congress again imposed restrictions upon freedom of utterance and publication. And it was no small part of the bitter cost of the World War that it thus provided the occasion for the weakening in a

measure of the traditions of unrestricted freedom of speech and press which were born out of the popular resentment against the Alien and Sedition laws of 1798.

ROBERT E. CUSHMAN

See: ALIEN; SEDITION; TREASON; ENEMY ALIEN; NATURALIZATION; ANTIRADICALISM; CIVIL LIBERTIES; FREEDOM OF SPEECH AND OF THE PRESS.

Consult: Anderson, F. M., "Enforcement of the Alien and Sedition Laws" in *American Historical Association, Annual Report 1912*, p. 113-26; Bassett, J. S., *The Federalist System* (New York 1906); Chafee, Z., *Freedom of Speech* (New York 1920).

ALIEN PROPERTY. The treatment of alien property in time of war was greatly affected by the growth of trade from the thirteenth to the eighteenth century. It is generally assumed that confiscation was common until the thirteenth century, but there was comparatively little alien property, except ships, to be found in most countries. The beginning of expansion of international trade found its first reflection in the *Magna Carta* (1215). Article 41 provides that alien property shall be safe in time of war if reciprocity is granted to English property by the national enemy. From that time many influences served to support immunity for private property, evidenced in the main by treaties. Although enemy property in enemy territory was generally confiscated, the practise of confiscating enemy property in one's own territory had gradually become unusual by the end of the eighteenth century, although numerous writers of the eighteenth and nineteenth centuries, failing adequately to distinguish between alien property in one's own jurisdiction and alien property in enemy territory, continued to speak of the "right" to confiscate long after the exercise of the alleged right had been abandoned.

The rule of immunity for private property, which in 1914 was deemed impregnable, was not the result of any outburst of humanitarian sentiment, but rested upon a sound development in political and legal theory which emphasized the essential distinction between private property and public property, between enemy owned property in one's own jurisdiction and in enemy territory, and between combatants and non-combatants. The natural law philosophers of the eighteenth century were not without their influence, proclaiming the conviction that those surviving the devastating effects of unmitigated war should have something left with which to take up again the thread of life. Modern eco-

nomie relations in their international manifestations, being based upon the mobility of capital, also brought the realization of the mutually destructive effects and futility of confiscation.

In the United States a special tradition in this matter had developed. There had been some sequestration of British debts by several of the colonies in the Revolutionary War, and the Treaty of 1783 undertook to restore the right of suit to the British creditors. The effort was not successful, so that the United States in 1802 paid to Great Britain some \$3,000,000 to make good its inability to carry out the treaty promise of 1783. Meanwhile the Jay Treaty of 1794, declaring in Article 10 against confiscation of debts or funds in any future wars of the signatories, had been concluded with Great Britain. Alexander Hamilton, in his defense of this provision of the treaty contained in his famous *Camillus Letters*, presented the reasons for this policy as lying in the reliance placed by aliens on the hospitality of the country in which they live. His argument may be said to have laid the foundation for American policy, for some forty treaties of like purport were concluded with other countries. They were designed to afford to aliens, resident and non-resident, an assurance of safety for their property, either by permitting its removal from the country within a limited period of six or nine months or by categorically denying the privilege of sequestration or confiscation. Although judges after the War of 1812 and the Civil War, relying upon text writers, occasionally expressed dicta justifying an alleged rule of confiscation, the fact is that the political departments of the government—Congress and the executive—had not authorized the confiscation of enemy property in any war of the United States until 1917.

The several belligerents in Europe at the time of the outbreak of the World War in 1914 enacted measures sequestering enemy property and prohibiting payments to the enemy. There was at that time no idea of confiscation, but the authorization of liquidation made restoration in kind difficult, if not impossible. As late as 1918 the English House of Lords reiterated the time honored doctrine that the property of enemy subjects was not to be confiscated.

The United States adopted a sequestration statute on October 6, 1917. The property of non-resident Germans was to be demanded and held by an alien property custodian as a 'common law trustee' to manage the property and "if and when necessary" to sell it in order "to

prevent waste and protect such property" and to prevent its hostile use against the United States. The first alien property custodian announced that "there is no thought of a confiscation or dissipation of property thus held in trust." As the war proceeded new ideas seemed to develop in the mind of the custodian. He persuaded Congress to authorize what he called "Americanization" of the property and obtained authority under the Act of March 28, 1918, to sell the property as though he were an "absolute owner." Much property was sold at sacrifice prices, although Congress did not intend to authorize confiscation. Most of the sales were made after the Armistice, when no belligerent purpose could have been served. Perhaps the most notorious of the cases was the Chemical Foundation transaction, in which 4500 chemical patents worth many millions were transferred *en bloc* at a uniform price of fifty dollars each to the so-called Chemical Foundation, organized by a group of industrialists and the then alien property custodian. The Supreme Court sustained this transaction as valid under the statute. Seizures were discontinued only on July 2, 1921.

The Peace Conference met in 1919. To the surprise of many thoughtful students there issued from the conference, in the form of Article 297 of the Treaty of Versailles, a provision to the effect that the Allied Powers reserved "the right to retain and liquidate all the property, rights, and interests belonging . . . to German nationals" in the territories under allied control. A similar provision is to be found in the other peace treaties. The proceeds were to be devoted to the payment of certain claims against Germany or German nationals. These claims were in the nature of private debts, claims due to exceptional war measures such as sequestrations, and so-called neutrality claims, which arose before the various countries entered the war. Any balance could be turned back to the owners or to the Reparation Commission for general distribution. The provision was not mandatory on the different allies, each country being left free to liquidate or return the sequestrated property. The German government was to indemnify the expropriated private owners.

Most of the European countries—notably England, France and its colonies, Italy and, with minor exceptions, Belgium and Rumania (old territory)—have confiscated the sequestrated property. As a matter of grace England

has consented to return amounts up to £1000 to certain persons domiciled in Great Britain and in certain necessitous cases. Not many have been able to take advantage of this concession, it is understood. South Africa has released the property of domiciled Germans and given South African bonds to non-resident Germans for their liquidated property. Italy has released up to 50,000 lire to each enemy owner, but has taken the balance. Japan has released up to 10,000 yen and portions of the balance varying from 20 to 50 percent, retaining an amount sufficient to pay private debts. Most of the South American states have released the sequestrated property in full. Canada has not yet determined its final policy, but unofficially appears to be committed to return at least the excess beyond that required to pay private debts. This at least has been the arrangement with respect to Austrian nationals. The British colonies adopted varied practises. The succession states—Poland, Rumania, Jugoslavia, Czechoslovakia—were restricted in their privilege of confiscation, but liquidated the property to some extent and were supposed to pay the proceeds to the expropriated owners. Some differences were made between territory previously possessed, in the case of an existing state, and that newly acquired. Turkey, after its victory over the Greeks at Smyrna, was able to nullify (by Article 65 of the Treaty of Lausanne) that provision of the Treaty of Sèvres which provided for the confiscation of Turkish private property. "Personal effects" were released only in some of the minor countries like Siam and the German colonies taken over by England, but patents and trade marks, unless sold with liquidated businesses, were in all countries returned to their owners. The so-called Young Plan of 1929 recommends that all further seizures or liquidations of German private property in allied countries shall cease. Probably not much property would be affected by this belated renunciation.

The German government has made but a small fractional payment to its expropriated owners, claiming inability to pay more. Germany brought a proceeding before the Dawes Plan Arbitration Commission claiming the right to deduct from the payment to the Allies the amount due to German expropriated owners, on the ground that this was an obligation imposed by the Treaty of Versailles, and that the plan stipulated that all German obligations under the treaty were embraced within its terms. Germany lost the case.

When peace was made between the United States and Germany, it was provided that German private property was to be retained until Germany made "suitable provision" for the satisfaction of American private claims against Germany. These included not merely the claims arising out of private debts, exceptional war measures and neutrality claims, as in the case of the European countries—an amount which would have been limited to about \$50,000,000—but claims of every character. A Mixed Claims Commission was set up in August, 1922, to determine the amount of the claims, with an American citizen as umpire. The awards on private claims, including approximately ten years' interest at 5 percent, are estimated at about \$200,000,000.

On June 5, 1920, a partial release was effected of the property of Germans, Austrians and Hungarians who became citizens of succession states by the treaties of peace, of certain classes of American citizens who by reason of their residence in Germany or other enemy territory had their property sequestered, and of American born wives of ex-enemy citizens. On March 4, 1923, the Winslow Act was passed returning trusts up to \$10,000, and \$10,000 on the larger trusts, together with all income earned after March 4, 1923, up to \$10,000 a year. On March 10, 1928, the Settlement of War Claims Act was passed, which returned 80 percent of the property of Germans and all the income earned since March 4, 1923. The owners of the withheld 20 percent are to receive 5 percent interest bearing participating certificates drawn against the fund to come to the United States under the Dawes Plan (2½ percent of the reparations, after numerous prior charges). For the income on cash in the treasury accumulated between 1917 and 1923, the so-called Unallocated Interest Fund, the owners are to receive non-interest bearing participating certificates. The undelivered sum (about \$75,000,000), together with the early payments to come to the United States from German reparations, is to be paid over to the American claimants against Germany. The property of Austrians has been returned in full, inasmuch as Austria has deposited a sum sufficient to take care of the American claims against that country, probably not over \$4,000,000. The Hungarians will probably receive their property under similar conditions. Two percent is deducted by the alien property custodian from all the trusts, in order that the United States may be repaid for the cost of ad-

ministering the property. The owners are thus paying the United States a substantial sum, in addition to taxes, as a condition of obtaining some 80 percent of their property. Because of the conditions attached to the retention of 20 percent, it seems unlikely that the United States will ultimately confiscate the 20 percent, even if German reparations should break down.

What of the future? The International Law Association at its 1924 meeting in Stockholm adopted the following resolution: "Resolved that this Conference is firmly of opinion that the revived practice of warring states by which they confiscate the available private property of alien citizens is a relic of barbarism worthy of the most severe condemnation." With few exceptions writers throughout the world have condemned the Allied practise of confiscation. It is a reversion to an ancient institution which had been deemed obsolete. Its destructive effects are likely to be considerable. Foreign investments become insecure, and the realization that the safety of foreign private property in war depends not on law but on the preponderance of force, is likely materially to hamper the reduction of armaments. It remains to be seen whether the confiscating countries will compensate the expropriated owners before the policy becomes irretrievable, and whether any legal code, in an effort to prevent the establishment of confiscation as a principle, will reaffirm the traditional rule of the immunity of private property in time of war.

EDWIN M. BORCHARD

See: ALIEN; ENEMY ALIEN; WAR; WORLD WAR; PROPERTY; CONFISCATION; ANGARY; MERCHANTMEN, STATUS OF.

Consult: Garner, J. W., *International Law and the World War*, 2 vols. (London 1920) vol. i, chs. iv-v; Simonson, Paul F., *Private Property and Rights in Enemy Countries* (London 1921); Armstrong, J. W. S., *War and Treaty Legislation, 1914-22* (2nd ed. London 1922); Fachiri, A. P., "Expropriation and International Law" in *British Year Book of International Law* (1925) 159-71; *Die Beschlagnahme, Liquidation und Freigabe deutschen Vermögens im Auslande*, ed. by Ludwig Bänfer and others, pts. i-iii (Berlin 1924-); Hays, Arthur Garfield, *Enemy Property in America* (Albany 1923); U. S. House of Representatives, 69th Cong., 1st Sess., Committee on Ways and Means, *Return of Alien Property; Hearings*, 4 vols. (Washington 1926); U. S. Senate, 69th Cong., 2nd Sess., Committee on Finance, *Return of Alien Property; Hearings* (Washington 1927); Janssen, Hermann, *Das amerikanische Freigabe-Gesetz vom 10 März 1928* (Mannheim 1928); Williams, J. F., "International Law and the Property of Aliens" in *British Year Book of International Law* (1928) 1-30.

ALIENATION OF PROPERTY may be voluntary, resulting from the intended acts of the owner, or involuntary, through the acts of organized society in forcibly taking the property for the benefit of creditors or of one long in adverse possession, or for the public use. It may be effected by acts *inter vivos*, or it may be testamentary, effective at the death of the owner.

From the Middle Ages down to our own times the power of alienation has been regarded as a necessary and natural element of property. In the language of the Supreme Court of the United States, it is "an inherent attribute of the property itself," but historically it is by no means that. In primitive social orders alienation is quite unnatural. The earliest known form of property was the community ownership of chattels, such as weapons, cattle and slaves, by the family, tribe or village. The community property was for community use, not for sale. Even when growing trade between tribes provided an economic urge for the transfer of chattels, alienation was possible only with the consent of the whole community, evidenced by elaborate ceremonial. Later forms of such ceremonials in proof of transfer are strikingly illustrated by the *mancipium* of the earlier Roman law, the dramatic livery of seisin of land and even of chattels in the Middle Ages throughout Europe, and by divers skeleton survivals in our own time, such as the sealing of written documents, acknowledgment before a notary and registration.

With the increase of trade and the improvement and expansion of political organization, community property in chattels and later in land slowly broke down and disintegrated into individual ownership, with broadening powers of alienation and decreasing requirements of time-consuming attesting ceremonial. Community ownership persisted in the *patria potestas* of the highly developed Roman law, with all its consequent restriction upon the power of alienation. Survivals of it were found in the feudal system of land tenure which during the Middle Ages spread over nearly all of Europe. Even in our own time we have remnants of the primitive institution of community property in the several forms of cotenancy still existing, and particularly in the common interests of husband and wife, such as tenancy by entireties, homestead and other rights of succession, and the "community property" generally recognized in legal systems derived from the civil law, and even in a few of

the American states. Safeguarding the family, even at the expense of business interests, the law will not permit either spouse by alienation to prejudice the rights of the other.

The older complex classification of property, based on the mode and extent of alienation allowed, such as, in the Roman law, *res Mancipi*, alienable only by burdensome ceremonial, and the *res nec Mancipi*, alienable by mere delivery, ultimately gave place, in the law of Rome and of those countries in Europe later deriving their law from Justinian's code, to a simpler and more natural division into movables and immovables, both quite freely alienable by the individual owner, *inter vivos* and by will. But this result was not achieved so easily or directly in England. Before the conquest Anglo-Saxon law made a sharp distinction between movables and immovables. The former were freely alienable, but quite a different rule obtained in regard to immovables. Folkland, which included by far the greater part of the valuable land of the island, held in community ownership, was wholly inalienable, although book-land, consisting of royal grants to religious houses and great men, appears to have been freely alienable. The Norman conquerors brought to England much of Norman law. The simple and natural division of property into movables and immovables was abandoned for the highly artificial and complex classification into personality and realty. Rights in personality, left largely to the church courts, in which the influence of the civil law was predominant, remained freely alienable. But the king's courts, in the interest of feudal control, assumed exclusive jurisdiction over the land, which was quickly put in feudal shackles that have scarcely yet been fully cast off. A unique system of feudal tenure was established, in which all land was held of the crown, while the tenant took an interest so narrowly limited that it could be aliened only with the consent of his overlord on the one hand, and of his heir presumptive on the other.

Those holding the land as tenants in chivalry under this system formed a privileged land-owning class who had no interest in trade, and dimly perceived that so long as they controlled the land of England they could control the people who must live on the land. Naturally they resisted every effort to facilitate its alienation, but such a static condition of property could not long survive. With trade increasing and lack-land burghers growing richer, with

population expanding and more and more mouths calling for corn, the restraints on alienation began to give way. The judges, almost uniformly sympathetic with the demand for freer alienation, first cut off the interest of the heir presumptive, and later defeated the lords' expected reversion by holding that feoffment to A and the heirs of his body created a fee conditional upon the birth of issue to A. The lords countered with the enactment by Parliament of the statute *De Donis* (1285), which created estates tail. But five years later in the statute *Quia Emptores*, known as the "charter of free alienation," they were forced to assent to the validity of feoffment in fee simple without the consent of the overlord, securing thereby the abolition of subinfeudation, which had hitherto greatly reduced the value of their feudal services.

The inalienable entails set up under the statute *De Donis* did not long remain unchallenged. Fines, or collusive suits, were used to bar entails but could not defeat the vested interests of reversioners and remaindermen. It was not until 1473, nearly two centuries after the creation of entails, that landed property was freed from this "perpetuity" by the decision in *Taltarum's* case. This bold piece of judicial legislation enabled the tenant in tail in possession, by the fictitious proceedings of a collusive suit termed "suffering a common recovery," to bar the entail and create in the plaintiff an estate in fee simple absolute. In the meantime the development of "uses" in land had greatly facilitated alienation. In 1535 the Statute of Uses much simplified the formalities required for the conveyance of land, while in 1541 land was made alienable by will.

By this time the evils consequent upon unreasonable restraints on alienation were fully recognized by the courts, but a new form of "perpetuity" soon appeared by reason of a decision in 1620 that certain future interests, known as executory devises and uses, did not share the destructible quality of contingent remainders. This ruling, threatening to take land out of trade channels altogether, was met by another famous achievement of judicial legislation known as the rule against perpetuities. This rule, in its fully developed form, may be stated thus: any estate so limited that it may, under any possible circumstances, vest in right at a later date than twenty-one years after lives in being at the time of its creation, is absolutely

void. In form it imposed a restriction upon the power of alienation. In fact it kept property open for the uses of business by freeing it from a tangled web of remote future interests. In like manner the long series of mortmain acts, beginning with *magna carta*, by prohibiting the transfer of lands to religious houses, thereby kept it from the "dead hand" of the church and made it available for the needs of commerce.

The rule against perpetuities being judge-made and not arbitrarily fixed by the words of a statute, its operation is highly elastic. Its application goes no further than the mischief sought to be remedied. Thus it does not affect an interest, however remote, if it is so limited as to be always in the control of the tenant in possession. For that reason it has not been applied to covenants to renew long term leases, or to rights of reverter and rights of entry, because such interests are not believed in fact to clog alienation.

The next move of the landowning class, in their struggle to retain control of the land by restricting alienation as far as possible, was the invention of the "strict settlement," a method of marriage settlement by a series of entails which, although not legally a perpetuity, nevertheless, under the influence of family and class pressure, in fact rendered a considerable part of the land of England inalienable in the hands of the landed gentry. This situation was met by the Settled Land Act of 1882, confirmed and extended by the Law of Property Act of 1925, under which the freehold tenant in possession has the unrestricted power of alienating in fee simple. This legislation also abolished primogeniture.

The American colonists brought with them to the New World the fully developed idea of the common law that unreasonable restraints upon alienation of property and perpetuities are contrary to public policy and void, but in determining just what restraints are unreasonable there appear some curious and interesting variations from the law of England. The most notable of these is found in the curious doctrine of spendthrift trusts. In England it is settled policy that any beneficial property right available to a person *sui juris*, whether by way of trust or otherwise, is also available to his creditors; but it is now equally well settled in all but a very few of the American states that, by the use of apt words in a deed of trust, an interest for life, at least, may be given in any

form of property, real or personal, which is beyond the power of the spendthrift to alien, or of his creditors to seize. The English rule results from an appreciation by a nation of traders that honesty is not merely the best policy but the only policy to safeguard commerce. The American doctrine seems to result from a reverence for the wishes of a grantor or testator which outweighs the interest of trade and extends to the spendthrift the protection always allowed to married women, to whose separate use trust property may be devoted freed from the perils of unwise alienation, voluntary or otherwise.

W. R. VANCE

See: PROPERTY; LAND TENURE; LAND TRANSFER; CONTRACT; MORTGAGE; INHERITANCE; ENTAIL; PRIMOGENITURE; EMINENT DOMAIN; EXCESS CONDEMNATION; COMMUNITY PROPERTY.

Consult: Gray, John C., *Restraints on the Alienation of Property* (2nd ed. Boston 1895); Digby, K. E., *An Introduction to the History of the Law of Real Property* (4th ed. Oxford 1892); Vinogradoff, Paul, *Outlines of Historical Jurisprudence*, 2 vols. (Oxford 1920-22) vol. i, p. 232-369; Holdsworth, W. S., *History of English Law*, 9 vols. (3rd ed. London 1922-26) vol. iii, p. 73-256; Pollock, Sir Frederick, *The Land Laws* (3rd ed. London 1896); Maine, H. J. S., *Ancient Law* (London 1906) ch. viii.

ALIENIST. The word alienist has largely been used in the past as synonymous with the word psychiatrist, but in recent years there has tended to grow up a distinction between the two terms. While psychiatry is used to cover the whole specialty of medicine which devotes itself to the care and treatment of mental disease, the practise of the alienist, or alienistics as it is sometimes referred to, has to do only with the determination of insanity in the legal sense, insanity being conceived to be only certain aspects or degrees of mental illness limited in accordance with legal definitions. Mental disease is therefore a medical or scientific term, while insanity is the legal and sociological term.

The function of the alienist, which is essentially that of the expert witness, is in theory to give the results of his scientific experience with mental disease in general, and in particular with reference to the case in hand, for the assistance of the court and the instruction of the jury. As an expert he is not confined to testimony as to facts. His testimony is essentially opinion evidence, and on the witness stand he is called upon to give his opinion of the bearing of certain symptoms upon certain legal issues involved, such as responsibility in criminal

actions and testamentary capacity in civil ones.

The testimony of alienists has in recent years fallen somewhat into disrepute because they have been pitted against one another in equal numbers; and because of the technical character of their evidence and the fact that they contradict each other, juries have tended to disregard it. Many efforts have been made to correct this state of affairs. The most outstanding suggestion is to employ state alienists who occupy a neutral position in the cause at issue and who may therefore be cross-examined by both the defense and the prosecution. Such a course does not limit either the defense or the prosecution from employing additional alienists, but it is felt that the neutral position of the state alienists would materially increase the weight of their testimony. In practise, however, the problem of the expert testimony of alienists remains in a very unsatisfactory state.

The psychiatrists, however, are coming into court work from a somewhat different angle and are rendering most valuable service. They are rarely seen on the witness stand, but usually make scientific investigations into the mental condition of individuals who come before the courts and render their reports directly to the court for its guidance. They have been of especial service in the juvenile courts, but are coming now gradually to do similar work in the criminal courts.

The taking over of this pre-trial work by the psychiatrist has made less and less necessary the employment of the alienist as an expert at the trial, and it is perhaps in this direction that one may look for the solution of the expert witness problem, so far as it relates to the question of mental disease and insanity.

WILLIAM A. WHITE

See: INSANITY; CRIME; EXPERT; EVIDENCE; CRIMINAL LAW; PSYCHIATRY; MENTAL HYGIENE.

Consult: Witthaus, R. A., and Becker, T. C., *Medical Jurisprudence, Forensic Medicine and Toxicology*, 4 vols. (2nd ed. New York 1906-11) vol. iii, p. 147-346; Glueck, S. Sheldon, *Mental Disorder and the Criminal Law* (Boston 1925); White, William A., *Insanity and the Criminal Law* (New York 1923); Glueck, Bernard, *Studies in Forensic Psychiatry* (Boston 1916); Brasol, Boris L., *The Elements of Crime, A Psycho-Social Interpretation* (New York 1927); Southard, E. E., and Jarett, Mary C., *Kingdom of Evils* (New York 1922) p. 438-41.

ALIMONY, as the term is popularly understood, denotes the obligation of a husband to continue to support his wife and any dependent children after absolute divorce or

judicial separation. As such it is generally understood simply as a provision for maintenance.

Historically, however, alimony is to be conceived as any compensation to either spouse for the disruption of the marriage. In the broadest sense it is an adjustment of the economic relations of the spouses. In its origin and evolution it is as much a penalty to prevent divorce as a provision in case of divorce. In ancient patriarchal societies, where divorce was absolutely unlimited for the husband, he might put his wife away without providing for her at all. In a more advanced stage a fixed penalty is often assessed against the husband if the wife is innocent of offense. This right probably arose to prevent blood feuds with the wife's relatives. Thus under the Code of Hammurabi a husband who divorced his wife without cause had to forfeit to her one mina of silver, and in addition restore her portion.

This latter provision marked an advance representing a greater stability of matrimonial and economic institutions. Alimony is now imposed as a positive legal duty which can be controlled by the spouses only to a very limited extent, but in its origin it was largely contractual. The husband's unlimited right of divorce began to be controlled by marriage contracts among the ancient Egyptians, Greeks and Jews. Indeed the Greeks finally went so far as to declare a marriage without a property settlement for the wife to be invalid and void.

The Roman law, which has had most influence upon western institutions, exhibited all these stages of development. Under the *manus* system of marriage the wife had no rights at all, but by the time of Justinian, when husband and wife were upon an equality before the law, it was established that a guilty wife lost her *dos*, and a guilty husband his *donatio propter nuptias*. Both spouses were liable to contribute to the support of the children. In the absence of marriage settlements, however, the guilty spouse forfeited one hundred pounds in gold. In case of divorce by mutual consent the parties could make any arrangement they wished about their property.

Perpetual alimony for the wife followed as a necessary metaphysical and economic corollary of the mediaeval church's doctrine of the indissolubility of marriage. The Protestant reformers who could allow divorce only by conceiving one of the spouses as a criminal emphasized particularly the penal character of alimony. Much

of the extravagance of the present Anglo-American law of alimony is to be attributed to the persisting influence of Reformation ideas which passed from the English ecclesiastical courts into the common law.

The present rules of alimony exhibit many of these survivals. Judges on the whole are still inclined to look upon alimony as a punishment. Its amount is usually affected by the degree of the husband's guilt, and is proportioned not so much to the wife's necessities as to her husband's financial capacity. It may be as high as one third of his income. Although the wife has to be innocent, she remains entitled to alimony if only guilty of lesser matrimonial offences than adultery. A wife may get temporary alimony (*pendente lite*) pending the very determination of her right to divorce. Alimony does not automatically cease upon her remarriage. Imprisonment for debt has long ceased to be popular, but a divorced husband may be incarcerated for failure to pay alimony. The alimony laws thus make marriage an opportunity for the determined "gold-digger." It is to be doubted, however, that alimony is related to the recent increase of divorce. If the wife is encouraged, the husband is correspondingly restrained.

The first step to reform the alimony laws will be taken when the principle is recognized that the mere fact of marriage can only metaphysically be regarded as a proper basis for alimony. This view would permit the duration of the marriage to be taken into account. The present economic emancipation of women should dictate the substitution of an equitable liquidation of the economic claims of the spouses upon each other for alimony. Even in the absence of a legalized institution of community property the intimacy of marriage creates its natural equivalent. The woman who has made her household her career would certainly be entitled to some allowance when the value of her services to her husband are considered. In any event the sexual disabilities of women remain, and the wife with dependent children should be entitled to adequate protection. In three American jurisdictions, Massachusetts, North Dakota and Ohio, statutes now give a husband the right to alimony under certain circumstances when he is the injured spouse. This reciprocity may be just in the present impasse but it represents a dubious reform. Where the conduct of one of the spouses has been such as to injure the other in health, reputation or property, a mutual right to damages might be allowed in the liquidation.

Many of these reforms have long been law in various European countries. The influence there of the Code Napoléon restored much of the enlightenment in matrimonial relations which characterized Roman law. The freedom with which alimony is granted in American states is in part a reflex of our economic efflorescence and social undifferentiation. But the general equivalent of the community and dotal property systems on the continent have restrained alimony. When granted it is limited mostly to cases of actual need. The husband, it is true, often has a right to alimony when incapacitated. The wife generally may be liable for a contribution for the support of the children. There was no right to alimony at all in Sweden until the new law of 1920 which established it only in cases of actual want. The reciprocal claims for specific injuries are also law now in the Scandinavian countries, but have been long allowed in Switzerland. In most countries where both parties are at fault in any way neither is entitled to alimony. Finally it should be noted that the right to divorce by mutual consent in Russia, Austria, Belgium, Rumania and the Scandinavian countries is itself a solution of the alimony problem, for then the parties may come to an amicable understanding upon the subject without the intervention of the law.

WILLIAM SEAGLE

See: MARRIAGE; DIVORCE; DOWRY; COMMUNITY PROPERTY; FAMILY; FAMILY LAW; FEMINISM; WOMAN, POSITION IN SOCIETY.

Consult: Howard, George E., *A History of Matrimonial Institutions* (Chicago 1904); Kitchin, S. B., *A History of Divorce* (London 1912); Bishop, J. P., *New Commentaries on Marriage, Divorce and Separation*, 2 vols. (Chicago 1891); Schouler, James, *A Treatise on the Law of Marriage, Divorce and Separation, and Domestic Relations*, 3 vols. (6th ed. Albany 1921); Barbié, Léon, *Guide pratique du divorce* (Paris 1927); Sellin, J. T., *Marriage and Divorce Legislation in Sweden* (Minneapolis 1922); Stylow, Herbert, *Die Unterhaltspflicht als Folge der Ehescheidung* (Leipsic 1920).

ALISON, ARCHIBALD, BART. (1792-1867), historian. He was born at Kenley, Shropshire, of Scottish parentage, studied at Edinburgh University, joined the Scottish bar and in 1834 became Sheriff of Lanarkshire. Before this he had entered literature as a contributor to *Blackwood's*, in whose pages he advocated the undiluted Toryism of the day, and he had long been collecting material for a *History of Europe from the Commencement of the French Revolution in 1789 to the Restoration of the Bourbons in 1815*.

This work appeared in ten volumes at Edinburgh between 1833 and 1842, and had a prodigious sale; by 1848 America alone had bought 100,000 copies. Assuming the role of political philosopher, he made the mistake of writing as a violent partisan. He frankly admitted that he wrote to illustrate certain theories. One was the comfortable notion that to disturb the established oligarchic order of society was to challenge destiny. With Alison in mind Disraeli, in *Coningsby* (1844), made Mr. Rigby speak of "Mr. Wordy's History of the late war" as "a capital work which proves that Providence was on the side of the Tories." Critics of the liberal persuasion had no difficulty in making matchwood of his most confident dogmatism. Later he brought the narrative down to 1852 in his *History of Europe from the Fall of Napoleon in 1815 to the Accession of Louis Napoleon in 1852* (9 vols. Edinburgh 1852-59), which gave him the opportunity of attacking the 1832 Reform Act, the 1844 act restricting the paper currency, and the abolition of the Corn Laws. Whenever he touched either economics or politics in the *History* or in his other writings it was as a die-hard Tory. He naturally sided with the South in the American Civil War.

W. H. DAWSON

ALLAN, HUGH, BART. (1810-82), Canadian captain of industry. He was born in Saltcoats, Ayrshire, Scotland, and received a thorough apprenticeship in Glasgow and Montreal in the management and business side of shipping and shipbuilding. His contributions to Canadian economic development consisted primarily in his ability to meet the demands of shipping in capital, organization and technique during the difficult period of technological change from wooden sailing vessels to iron steamships. The eventual success of the shipping industry was accompanied by the tying-in of that business with various other lines of development, industrial, mining and financial (Merchants Bank), a process in which he played an important part. The Pacific Scandal, however, is evidence that the railroads, with their heavier demands for capital and organization, were largely beyond his control.

H. A. INNIS

Consult: Dent, J. C., *The Canadian Portrait Gallery*, 4 vols. (Toronto 1880-81) vol. ii, p. 38-40; Innis, H. A., *A History of the Canadian Pacific Railway* (London 1923) p. 75-83; Bowen, F. C., *History of the Canadian Pacific Line* (London 1928) p. 3-45.

ALLAN, WILLIAM (1813-74), English trade union leader. He worked as journeyman engineer until his appointment (1847) as general secretary of an engineering workers' union. Allan favored amalgamation of the various engineers' unions and contributed largely to the formation of the Amalgamated Society of Engineers (1851), of which he was general secretary for over twenty years. During this time the numerical and financial strength of this national society of skilled craftsmen became so impressive that many unions took its constitution as a model. It provided substantial unemployment, sickness and other friendly benefits; and the moderation of its policy contrasted with the aggressiveness and violence of various old-fashioned local unions. William Allan instituted an elaborate system of financial control, but the amount of administrative routine involved, together with his extreme caution and desire to conserve the society's funds, resulted in lack of constructive trade policy.

William Allan was associated with Robert Applegarth in the informal "cabinet" of trade-union leaders who guided the movement resulting in legislation for full legal status of the unions (1871). The success of this movement was facilitated by the favorable impression on public opinion created by the moderation and financial integrity with which Allan's society, and others modeled on it, were administered.

J. H. RICHARDSON

ALLEGIANCE is a concept which, despite its narrow legal meaning, is also of significance to political philosophy, for it connotes the emotional ties which bind the individual to a political group or association and to the symbols which represent it. The word allegiance is commonly related to the Latin *ligius* (French *lige*) and its derivatives *ligeantia*, *ligeitas*, etc. These terms denote feudal relationship; the adjective *ligius* therefore also occurs in connection with *homagium* when it characterizes unconditional homage. The English kings seem to have succeeded at an early period, certainly in the twelfth century, in establishing their exclusive right to unconditional feudal superiority, so that wherever *ligium homagium* is done, the express reservation of faith toward the king is required (for an interesting case cf. Coke, *Institutes*, pt. i, sect. 85). It seems that this claim of the king was effectively linked with another and more ancient institution going back to Anglo-Saxon times, namely with the

oath to keep the king's peace, i.e. not to commit certain crimes nor to conceal the knowledge thereof. This oath was originally required of every man (cf. Laws of Eadmund I and Laws of Canute c. 21, quoted in Stubbs, *Select Charters*, 9th ed. Oxford 1913, p. 77, 87), but it appears to have been gradually restricted to those who did not do homage to the king, such as magnates, knights and their relatives, clerks, *liberi homines* and the like (Bracton, *De legibus Angliae*, vol. ii, f 124b). Whether or not this oath might be associated with the origin of frankpledge (cf. W. A. Morris, *The Frankpledge System*, New York 1910, ch. i, and the literature cited there), it is likely that it became associated with the view of frankpledge under Henry II. It has been suggested by Maitland that frankpledge and the tithing to which it belongs served as a foundation for a part of the system of administering justice initiated by Henry I and developed by Henry II (Assize of Clarendon c. 1. in Stubbs, *op. cit.*, p. 170); for "under the influence of the assize of Clarendon the duty of producing one's fellow-pledges to answer accusations seems to have been enlarged into a duty of reporting their offences, of making presentments of all that went wrong in the tithing" (Pollock and Maitland, *History of English Law*, Cambridge, Eng. 1895, vol. i, p. 557). This suggests that the oath of allegiance or allegiance, as it was often called until the seventeenth century, is the result of merging two oaths, namely the oath administered in connection with the allegiance of offenses violating the king's peace and the oath of fealty administered in the confirmation of the liege homage, later called the natural ligeance due to the king. If this hypothesis were accepted, it would solve the etymological problem involved in deriving the word allegiance from *ligius*, because it would explain the prefix "al-" and also why this peculiar concept should have arisen in England alone.

For certainly on the continent of Europe kings were not successful in advancing similar claims, and it was only in the fifteenth century that the French kings definitely established this right. In Germany, on the other hand, the *ligium homagium* as well as the feudal tenancy to which it belonged gradually disappeared after the efforts of the Hohenstaufen emperors, particularly Frederick I, to secure *ligium homagium* for themselves had been balked. The general development of feudal institutions in central Europe was unfavorable to such a doctrine; for the principle *nulle terre sans seigneur*,

which came to prevail in England even more widely than in France, never gained ascendancy in many parts of central Europe. As a result the concept of allegiance is peculiar to English law and has no real equivalent in French, German, Italian and other continental jurisdictions.

In England the concept of allegiance was effectively linked with the crime of treason by the statute 25 Edw. III c. 2., which defines the offenses which may be held to be treason. The gradual expansion of royal pretensions is evidenced in the reign of King Richard II by the statute 21 Rich. II c. 3., which made high treason merely the purpose and intent of killing or deposing the king, without any overt act to demonstrate it. Although these particular enactments were repealed under Richard's successor, the same tendency exhibited itself again under Henry IV and Henry VIII (Coke, *Institutes*, pt. iii, and Blackstone's *Commentaries*, bk. v, ch. vi) and Elizabeth. Particularly under the two latter monarchs there began the tendency to use breach of allegiance, that is, treason, in their struggle with the church, a tendency which culminated in the reign of James I, who might properly be described as the philosopher of allegiance, since three fourths of his writings center around this concept. It was the feudal proprietary nucleus of the concept of allegiance and its ancient relation with a most solemn oath which made it possible for James I to brand a breach of it as heresy. Moreover the notorious Gunpowder Plot strengthened his hand in insisting upon the complete separation of civil and ecclesiastical allegiance, at which his legislation of the next few years is aimed (3 Jac. I c. 2, 4, 5 and 7 Jac. I c. 2, 6). The center of this legislation was of course the oath of allegiance itself, in which the recognition of the pope as a temporal lord was foresworn. The famous decision in Calvin's case (v. 7 Coke Rep. 1; also to be found in Howell's *State Trials* vol. ii, 1608, no. 85), established this as the authoritative interpretation of the legal concept of allegiance for some time to come.

When in the succeeding century the people politically organized came to inherit the exercise of the power which the kings had consolidated, the concept of allegiance underwent a gradual transformation. While allegiance was formally still due to the king, it was in fact owed to the body politic of which he was the formal representative. This classical common law notion of perpetual allegiance as it prevailed in the

England of the seventeenth and early eighteenth centuries is in many respects the most powerful expression of the national state in its rigid seclusion and insular self-sufficiency. As far as the individual was concerned, he was considered to owe this allegiance from the moment of his birth on English soil. He could not renounce it except by permission from the king in Parliament. It was the basis of all his rights and duties as an Englishman. Its feudal origin is clearly evidenced in the fact that only such allegiance gave a man the right to hold real property in England. Although an alien might acquire the status of subject through an act of Parliament, the procedure for effecting this was attended by cumbersome formalities.

Such a rigid concept was bound to be subjected to numerous alterations as modern trade began to develop, and the classical doctrine of allegiance as enunciated in Calvin's case (1608) was slowly weakened by many minor exceptions. This process eventually led to the Naturalization Act of 1870 (33 Vict. c. 14) which adapted the status of subjects to modern conditions, accepted the principle of free interchange of citizenship and thereby deprived the concept of allegiance of most of its significance.

This development had been anticipated by the fate of the concept of allegiance in the United States. In the early years of the republic the prevailing opinion seemed to be that a citizen could not divest himself of his allegiance except under the sanction of the law of the United States, and that until some legislative regulations were made, the rule of the common law that allegiance is perpetual must prevail (*Talbot v. Janson*, 1795, 3 Dal. 133-70). On the other hand, Caleb Cushing expressed the opinion, when he was attorney general, that the "doctrine of absolute and perpetual allegiance is inadmissible in the United States. It was a matter involved in, and settled by us by, the Revolution, which founded the American Union" (p. 166 in 8 Op. Atty. Genls. 139-69). In expounding the same doctrine Mr. Justice Story said that allegiance is "nothing more than the tie or duty of obedience of a subject to the sovereign under whose protection he is" (*Inglis v. Sailor's Snug Harbor*, 1830, 3 Peters 99-191). The complication introduced by the famous *Dred Scott* case (*Dred Scott v. Sandford*, 1856, 19 Howard 393-633) was swept aside by the Fourteenth Amendment, which significantly does not speak of allegiance at all but of an oath to the Constitution of the United States.

The same tendency later manifested itself in congressional legislation dealing with citizenship, expatriation and the like (Act of July 27, 1868). The citizen either expressly or impliedly takes an oath to support the constitution and the laws of the United States, and no personal relation is entered into with the government, legally speaking. It is a relation among the citizens that is involved and a pledge of obedience to the laws, which the citizens make for themselves (*United States v. Wong Kim Ark*, 1897, 169 U. S. 649-732). Still, law dictionaries nowadays usually distinguish three kinds of allegiance, natural allegiance, acquired allegiance, and local or temporary allegiance (for the latter see *Carlisle v. the United States*, 1872, 16 Wal. 147-56). Allegiance is there defined as "the obligation to fidelity and obedience which the individual owes to the government under which he lives, or to his sovereign, in return for the protection which he receives." This definition, when applied to the threefold distinction we have just indicated is lacking in definite meaning and prone to lead to confusion. This is most clearly shown by the cases of double allegiance which arise from the doctrine of dual nationality in international law when a naturalized citizen's country of origin refuses to recognize his right of expatriation.

The significant fact is that those relations of political loyalty which were formerly the result of allegiance are now the result of nationality. For the most part the only relations for which the term allegiance is really needed in modern law are those which exist between a resident alien and the state under whose jurisdiction he lives, due perhaps to the fact that in its territorial aspect the modern constitutional state resembles its feudal predecessor. The international mobility of population today has produced migrant nationals who wish to change or retain their original citizenship. This has given a new vitality to allegiance since it may now be used as the instrument whereby governments, before granting citizenship to an alien, assure themselves that he does not adhere to ideals and beliefs which are contrary to the prevailing national mores and which make an oath of allegiance without reservations impossible. The oath of allegiance, which has always been found useful in test acts motivated by a fear of the pope, may also be used even today in periods of subversive movements as a protection against radical organizations; in this connection it may even be applied to native citizens

seeking public employment or entering public office. In another direction the concept of allegiance may take on a new lease of life in the recent tendencies to emphasize the role of the crown in rebuilding the British Empire in terms of a free commonwealth of nations. One might also mention the oath of "allegiance" to be taken by members of the Parliament of the Irish Free State (Art. 4 of the Peace Treaty). But even here it ought to be noted that the allegiance is to the constitution, and that the faithfulness to the king is "in virtue of the common citizenship of Ireland with Great Britain."

While the legal significance of allegiance is not great at present, its broader philosophical implications have entered into the pluralistic attack upon the classical theory of the state and sovereignty. For the emotional ties which bind the individual to his state and his country of birth cannot be separated clearly from the emotional ties which bind that same individual to other groups or communities and the symbols which represent them. The view of allegiance taken by monistic theories of the state varies with the reason advanced for the necessity of a supreme authority. The theory which emphasizes the natural necessity of a unitary authority sanctioning the body of legal rules upon which all other groups depend for their existence treats allegiance as a phenomenon of nature, expressive, as Blackstone says, of a debt of gratitude. To the theorist, however, who emphasizes the purposive cooperation of free-willing citizens sanctioning the legal rules upon which other groups depend, the duties of citizenship express the binding force of the actions implied therein much more adequately than does allegiance.

CARL JOACHIM FRIEDRICH

See: AUTHORITY; CITIZENSHIP; TREASON; FEUDALISM; MONARCHY; CHURCH; NATURALIZATION; DUAL CITIZENSHIP; ALIEN; PATRIOTISM.

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